MAAS / PLOWMAN

1807-2159

COLOMBIA

RECORD

ECUADOR

4280-

4572

PLANT COLLECTIONS from COLOMBIA and ECUADOR.

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HARVARD UNIVERSITY
CAMBRIDGE, MASS. 02138

All BIRM duplicates sent to K.

Duplicates at COL, U and as indicates

COLLECTIONS of Paul J.M. Maas and T. Plowman

COLOMBIA: Dept. Cundinamarca
Estacion de Peaje, near Soacha on road to Silvania. Alt. 2450 m.
10 Oct 1974

Maas & Plowman 1807. GH (2) MO

Solanum lycioides L.
det. D. Hunziker 1976.
Open roadside. Branched shrub 1.5 m. Fls. deep violet. Frs. orange.

COLOMBIA: Dept. Tolima
Hacienda Cocuita, entre Melgar and Carmen de Apicala. Rio Sumapaz.

1808 Rhipsalis.

GH (4)

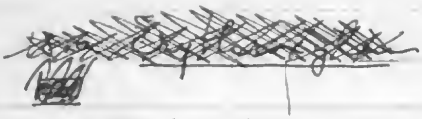
Hanging epiphyte. Frs. reddish. Fls. white

1809.

(2)

Vine 3 m. Corolla tube greenish white turning pale yellow. limb yellow-green, turning yellow. Calyx pale yellowish-creamy. Frr. green with 7 undulate ribs.

N.B. 3754. Erythroxylum sp. nov. - in flower (one old fruit).
3765. E. hondense in young fruit - beginning of wet season 2 floweringS.



Colombia: Dept. Tolima.
25 km. east of Cajamarca on road to Ibague. Alt. 1200 m.
Forest remnant along Quebrada.

1810. Maranta aff. arundinacea L.
(6). det H. Kennedy 75
Scandent herb 2 m. tall.
Fls. white. Frs. light green.

1811. Peperomia
(2)
Herb, succulent reddish
Stems + petioles. Spikes creamy
white

1812. Adiantum polyphyllum Willd.
GH (6) det K.U. Kramer 1975
Spores Herb 1 m. ~~with~~

#

1813. Renealmia occidentalis (Sw.) Sweet
(4) var. occidentalis
Herb 3 m tall. det Maas.

1814. Heliconia mutisiana Cuatrecasas
GH (12)
Seed
Herb 3 m tall. Infl. pendant bracts distichous, red, covered with white hairs, rachis red with white hairs, bracteoles & pedicels yellow fls. yellow, fr. green → blue. Petiole 40-70 cm. lamina 140-170 x 22-28 cm.

1815. Selaginella Sp.
GH (3) Herb on rock.

1816. Heliconia latispatha
(2)
Herb 3 m. tall, bracts orange, rachis greenish orange, fR. green. Fls. greenish yellow. Petiole 55 cm. lamina 90-110 x 25 cm.

1817. Philodendron
GH (2) Vine growing on rocks in stream. Spathe green.
Lire-Waimea 1981!
SEL 58-75-30

COLOMBIA ~~QUINDIO~~. TOLIMA.
18 km. East of Cajamarca on road to Ibagué. 1600 m.
Rocky Quebrada. Forest remnants.
1 Oct 74

1818. Anthurium

GH

Vine on dead log over creek. Spathe & spadix green. Frs. white.

1819. Piper aequale Vahl s.l.

GH (5)

Shrub 3 m. fall. det. Burger 1981

1820. Loasa triphylla Juss. var. papaverifolia (HBK) Urb. + Gilg

(4) Herb 0.5–1 m. fall. Calyx green, corolla white. Corona yellow with red apex.

GH

det Maas 1974.

~~1821 Helianthus~~

~~Herb [illegible]~~

— Cuatresia cuspidata A.T. Hunz. —
TYPE NUMBER

COLOMBIA: DEPTO. QUINDIO.
Calarcá. Elev. 1500 m.
Secondary forest above pueblo
(road to Ibagué). 1 Oct 74

1821. Heliconia griggsiana Idrobo + L.B. Smith
GH seed
Herb ca. 6 m. tall, forming dense stands on forest margin. Petiole 60-80 m. Lamina 160-180 x 45 cm, costa reddish, Stems + lower leaf-side pruinose. Bracts distichous, pruinose, rachis red; fls. orange-yellow, pedicels + ovary pale yellow

1822. Dieffenbachia seguine
GH (3) det T. Croat 1975.
Herb to 1 m. tall. Spathe light green. Frs. yellow-green. Odor of Skunk (strong).

Witheringia coccoloboides (Dammer) Hunz.
(1823) ~~Cyphomandra~~ det. A. Child 1975.
GH (3)
cuttings to Lester
Nearly Unbranched Shrub to 1.5 m. tall. Fls. pale yellow.

COLOMBIA: Dept. El Valle.
Rio Nima above Trejo. 1850 m.
20 Oct 1974. forest.

1824. Siparuna
GTH (4)
Tree 6 m. tall. Calyx orange.
Ovary pale green. Forest edge.

1825. Solanum tetropetalum Rusby
GH det. A. Child 1975.
MO
seed Creeping, prostrate vine on rotten log. Fls. white. Fr. red orange.

TYPE
1826. Renealmia ligulata Maas
A U GH det T. Plowman 1975
COL MO
F NY
K VALLE Herb 3 m. tall. Bracts, rachis, peduncles, pedicels, ovary, fruit calyx red; corolla labellum white. anther + staminodes purple.

1827. Solanum aphyodendron Knapp
GH (5) det. S. Knapp 1985.
MO
BIRM Shrub 2 m. tall, cut-over hillside. Fls. white. Frs. light green.

1828. Solanum

GH (4)

Shrub 2 m., cut-over hillside
Fls. white. frs lt. green.

1829. Solanum

"tachuelo"

GH
MO
BISH

Tree 8 m. tall, 25 cm. DBH.
Fls. violet, greenish black fruit,
with very hard pericarp.
live: Waimea 1981

1830. Heliconia scarlatina Ab. + Mor.

(2)

Herb 1.5 m. Br. distichous, rather
flat, scarlet, rachis scarlet, pedicels
green to reddish, ovary yellow. Fls.
curved, green, fr. blue. Petiole
70-90 cm. lamina 70-100 x 25 cm.
det. L. Anderson 1982

1831. Epidendrum

Ames (4)

2° fst. Terrestrial herb. Fls.
+ pedicels magenta. Sepals yellow-
ish inside, labellum yellow in centre.

scabrida Fritsch det Utrecht

1832. Kohleria ~~aff. ferrugines~~ Gesneriad.
(6) Herb to 50 cm. Calyx green.
Corolla red, purplish lined inside.
Frs. brownish red.
det. H. Wichler Fb.

1833. Boehmeria aspera Wedd.
GH
Shrub to 5 m. tall - Fls.
reddish

1834. ~~Bactris~~ Chamaedorea
(2)
Palm 2 m. tall in fot. understory.
Infl. green turning yellow.

1300 m. Near Caluce. Houseyard.

1835. ~~Phoradendron~~ Loranth.
GH (4) Oryctanthus alveolatus (H.B.K.) Kuyt
US
Parasite on Erythroxylum
#1836.

ECON F
U US
COL
UPS
1836. Erythroxylum novogranatense
(6) "Coca"
cuttings to Chuck (A) Tree 4 m. tall, 20 cm.
foto DBH - Fls. creamy white. Ls.
Fls. small, short pedicel. yellow-green, paler beneath, bilineate.
- lvs. for analysis
use: Lvs. boiled with salt for dolor de muelas. Also with panela for stomach ache.

COLOMBIA: El VALLE: Near Queremal.
1250 m. 3 Oct 1974. Forest on steep slopes along Quebrada.

1837. Diastema quinquevulnerum Planch. & Lind. Gesner.
(4)
Herb, fls. white. Lobes purplish dotted. On steep rocks, fl. margin.
A. J. M. L. 1976.

1838. Columnea sp. nov. Generic
(3) aff. formosa (Mart.) Mart.
On tree along river. Calyx lobes reddish. Corolla tube red. Apical part + lobes yellow. det. AJML. 1976

1839. Asplenium cuspidatum Lam. fern.
GIT (4) det. MT Murillo 1975
On steep banks of stream.

1840. Cavendishia tryphera A.C. Smith Ericac.
(1)
Shrub on road margin. Bracts & corolla carmine red.

1841. Anthurium
(2)
Terrestrial herb along stream. Spathe lt. green. Spadix deep yellow.

1842. Anthurium

GH (4)

Terrestrial herb along stream. Spathe lt. green. Spadix brownish.

1843. Anthurium

GH

Climbing or terrestrial. Lvs. cordate. Spathe lt. green. Spadix dark brown, maturing green.

1844. Anthurium

(2)

Climbing or terrestrial, Spathe lt. green. Spadix dark brown, maturing green.

1845. Anthurium

(1)

live Terrestrial herb. Spathe dark purple abaxially, green-purple adaxially. Peduncle purple. Spadix red-orange.

1846. Psammisia (3) Erie.

Scrambling shrub. Pedicels red. Ovary green. Calyx pink. Fl. buds pink.

1847. Philodendron (1)

Climbing herb. Spathe red-purple. Spadix creamy.

1848. Anthurium (1)

Climbing epiphyte. Spathe green. Spadix creamy.

1849. Securidaca cf. trianae Kill. + Dug. (3) GH

Liana. Calyx black-purple. Corolla Purple.

1850. Piper sp: P. cristalinianum Trel. + Yun
F (4) det. R. Callejas 1982.
GH Small tree 5-6 m. Lvs:
greenish white beneath. Spikes
purplish green.

GH 1851. Piper urostachyum Hemsley
(5) Shrub 1.5-2.5 m. det. Burger 1981.

1852. Piper
GH (5)
Vine; lf. veins + midrib pur-
plish beneath. Peduncle purple.
Spike greenish green.

(Gmel.) Chr.
1853. Lophosoria quadripinnata fern.
GH (8) Terrestrial herb. petiole 2.5 cm.
lamina 6 m. Pinnae 15, sub-
opposite, longest 1.5 m. det. MTM

1854. Palicourea Rob.
GH (6) Tree 4 m. tall. Rachis + pedicels
red-purple. Bracts purple. Calyx
dark blue. Corolla fleshy, dark →
light blue. Unripe fr. green.

1855. Ocotea

GH (3) Tree 6 m. Young fr. + capsules green.

1856. Solanum

GH (2) Shrub 1.5 m. Fls. creamy yellow.

1857. Psychotria Rubiac.

GH (5) Shrub to 3 m. Fls. white FR. bright blue.

1858. Besleria tambensis Morton Gesner.
(4) det. A.J.M. Leeuwenberg 1976.
Shrub to 3 m. Calyx green. Corolla orange. Frs. white.

1859. Spigelia filipes Rusby
(4)
F Herb 50 cm. Fls. pale pink.

1860. Psychotria Rub.
(1)
Shrub 1 m. Branch dark green.
FR. white.

U
GH 1861. Psychotria macrophylla R. + P.
COL Shrub 2 m. Rachis + pedicels dark green.
FR. white.

Dalbergaria picta (Mart.) Wichler

1862 ~~Columnea~~ det H. Wichler Gesner-76.

U, GH (4) Shrub ca. 2 m. Lvs. red tipped. Bracts pale yellow with purple spots. Corolla covered with white hairs.

1863. Ficus

(4) Shrub ca. 2 m. Figs green, reddish toward tip.

~~Columnea guttata~~ P. + E. det Utrecht

Dalbergaria sp. nov.

1864. ~~Columnea~~ Gesneria?

(3) det. Hans Wichler '76.

Shrub 1 m. tall. Lvs + midrib beneath red-tipped. Bracts yellow. Calyx yellow with pink beneath. Fls. red. Corolla white.

1865. Blakea sp. prob. nov. aff. B. florifera or B. palearea Trelease.

GH (4) Shrub 4 m. on rocks along creek. Calyx green. Corolla white, pink at apex. det J Wurdack 1975

1866. Rentrepia

Ames Epiphyte. Lower sepal yellow purple veins (2). Small sepal purplish. 2 petals 3

Lab. br. orange.

1867(6). Selaginella

On steep banks along stream.

1868(3). Gram.

Extensive scrambling grass on stream banks.

1869(2) Sigmatostalyx cf. cuculigera (Schltr.) Garay Orchid.

Ames

Epiphyte. Fls. pale green, reddish at base, Isabella yellow. det Dodson 1980

1870. Sigmatostalyx aff. graminea Lindl. Orchid.

(4) Epiphyte. Fls. yellow with some purplish dot. ~~Estn yellow~~ at base.

1871. Pleurothallis Orchid.

Ames (4) On steep roadside. Fls. dark yellow with brownish fringe.

1872. Escobedea

GH Open roadside. 1450 m. t.

Herb ca. 75 cm Corolla white

1873. Hepatici.

Hanging from steep ravine.

1874. Lycianthes profunderugosa Bitt.
GH (3) det. W.G. D'Arcy.
U Prostrate creeping herb. Fls.
Live → Donnell pale lavender. Fr. pale yellow.
Mo-live

1875. ~~Phragmipedium~~ Orchid.
Ames (5) Schlimii (Linden & Rchb. f.) Garay
Steep rocky roadside. Calyx pale purple. Corolla lobes white, pale purple at base. Hooded petals pale purple.

1876. Orch.
Ames (3) Herb on steep rocky roadside.
Fls. white.

1877. Orch.
Ames (4) Herb on steep rocky hillside.
Fls. dark orange.

1878. Sphyrospermum buxifolium Ericac.
(3) P. & E. det Sleumer 1975

Creeping herb on steep rocky roadside. Ovary reddish. Corolla white with slight purplish tinge. Fr. pale blue.

1879. Calathea prob. sp. nov. aff. C. lateralis
GH (3) det. H. Kennedy 1978.

Herb on steep forested hills. Fls. pale purple. Petiole 110 cm. lamina to 80 × 25 cm.

1880. Pitcairnea multiflora L.B. Smith Bromeliad
GH (3) det LB Sm.

Herb on steep rocky roadside. Rachis pale green, turning red. Fls. yellowish green. Bracts pinkish.

1881. Anthurium
GH (2)

Herb on steep rocky hillside. Spathe light green. Spadix green when young, red in fruit. Frs. bright yellow, turning white.

1882. Disterigma agathosmoides Ericac.
(2) (Wedd.) Ndzu.
Herb hanging from steep rocky roadside. Corolla dark red.
det Sleumer 1975

1883. Stelis
Epiphyte. Fls. whitish brown, reddish at centre.

Colombia: El Valle. Cali. 30 Oct

1884. Erythroxylum novogranatense (Morris)
ECON (4) Hieron.
US Small tree 5 m. tall cult. in
U homeyard. Lvs. bright yellow
green. FR. light green.
Common ornamental shrub.
Calle 15N x Cra. 8N.

COLOMBIA: El Valle. 30 Oct 1974
old road to Buenaventura, Km.

1885. Brugmansia aurea Lagerheim
GH (4) Treelet 3 m. Fls apricot, pendant.

1886. Erythroxylum novogranatense (Morris) Hieron.
ECON (6) Shrub 1 m. cult. in yard. Fls.
US very large, yellowish. Lvs. pale yellow
MO
F U

Green, chlorotic.

1887. Monnina cf. pilosa HBK.
GH (3)
Shrub along roadside. Fls. dark blue. "Inner petals" yellow.

COLOMBIA: El Valle. Near Queremal. 1350 m. Steep slopes along Quebrada in forest. 3 Oct 1974.

1888. Pilea
GH (3) Herb on steep, rocky forested slope. Fls. greenish.

1889. Selaginella
GH (4) Herb on steep, rocky forested slope.

1890. Gesn.
(2) Shrub 0.5 m. Fls. orange.

1890A. Drymonia ff. warszewiczii Haust. det. A. J. M. Leeuwenberg 1976.

1891. Kohleria ferruginea Fritsch Gesn.
Herb to 1m. Corolla green, Corolla red. Stems & ovary with purple hairs.

Ames 1892. Sobralia crocea (P.+E.) Rchb.f. Orchid.
(4) Epiphyte. Fls. orange. FR. green.

1893. Stelis spathulata R. + P.
(3) Epiphyte. Fls. greenish.

1894. Pleurothallis Orchid.
(2) Epiphyte. Fls. yellow.

U GH col — 1895. Cocco.cypselum brevipetiolatum Steyerm. Rub.
Creeping herb. Fls. pale blue.
FR. dark blue.
det. J. A. Steyermark 1976.
1 ive Benta Waimea seed PTBG

1896. Adiantum kalbreyeri C. Chr. Fern.
(3) On steep banks in forest near stream.

1897. Alloplectus schultzei Mansf. Gesner.
(4) Shrub to 1.5 m. Calyx & corolla orange. Ripe FR. Red. Locally Common. det H. Wichler 76

1898. Ericac.
(2) Shrub 1.5 m. Calyx pale red. Corolla tube red, lobes white to deep pink.

1899. Thelypteris decussata (L.) Proctor fern.
GH (4) det K. U. Kramer 1975
Terrestrial ~~[illegible]~~ fern. Petiole
80 cm. Lamina 160 cm.

1900. Costus plowmanii Maas
det Maas 1975
A: Isotype
U, AAU, COL,
E, F, GH, K,
MO, NY, P, US
VEN.
Herb to 3 m. Bracts red. Fls.
yellow. Sheath purple-red.
= Pl. 13047

1901. Poraqueiba? ~~Myrsina~~?
(3) Tree 4 m. Ripe fruit black,
shiny.

Ruellia potamophila Leonard
1902. Herb det D. Wasshausen 75 Acanth.
GH (4) (Shrub) to 1.5 m. tall. Fls.
white.

GH 1903. Siparuna
(4)
Scandent shrub 2 m. Fls.
yellow. Frs. red, ~~oneri for~~ aromatic,

1905 Peperomia
(2)
Epiphyte. Lvs. purplish ~~[illegible]~~ beneath.

GH 1904. Blechnum lehmannii Hieron. Fern
(3) On steep clay bank in forest along stream.
det K.U. Kramer 1975

1906. Trichomanes hymenophylloides v.d. Bosch Hymenop.
(3)
Epiphyte herb. det K U Kramer 75

GH 1907. Eleocharis
(3)
Herb on rocks in Creek.

A 1908. Heliconia
Herb to 8 m. Infl. pendant. Bracts (to 42) distichous, bright red, rachis brown. Fls. orange-white. Fr. red-purple, maturity blue. Petiole 1.5-2 m. Lamina 2.5-3 x 0.6-0.8 m.

seed PTBG Waimea 1981!

1909. Utricularia jamesoniana Oliv.
Alc ← (1) Epiphyte. Fls. white
det P. Taylor 1978.

1910. Xiphopteris serrulata (Swartz) Kramer fern
GH (2) Epiphyte.

1913-1917 - mosses & liverworts,

COLOMBIA: El Valle. New road from Cali to Buenaventura. Km. 71 Limones. Alt. 150 m
3 Oct 74

1918. Costus villosissimus Jacq.
(3)

Herb to 2 m. Bracts + appendages green. Corolla + Stamen yellow. Labellum yellow or slightly tinged with pink.

leucanthus Maas

1920 ~~19~~. Costus sp. nov. TYPE
(6)

U
COL
F
GH
K
US

Herb to 2.5 m. rather common. Bracts red, callus green. Calyx + bracteole red, apex green. Corolla white. Labellum white, slightly tinged with yellow in the middle.

~~1920~~

1919. Costus lima K. Schum.
(3)
A

var. scabremarginatus Maas

Herb to 2.5 m. Bracts + appendages dark red. Calyx + bracteole pale red. Corolla base yellow. Lobes pale orange-red. Stamen and labellum yellow, then apex reddish.

1921. Cnemidaria quitensis (Domin) R.M. Tryon fern.
Terrestrial fern. Petiole 1.6 m.
Lamina 1.75 m. Leaflets 52.

1922. Calathea inocephala (O. Ktze) Kennedy + Nicolson
(8)

GH
Live Helen
MDE

Herb 2 m. Petiole 60-80 cm. Bracts pale green becoming purplish brown, apex slightly recurved.
Calyx lobes pale green.

?

~~Ff.~~ silvicola Kennedy

1923. Calathea ~~altissima~~
(8)

HK ← (A)

Herb 2.5 m. Petiole 1.4-1.8 m.
Lamina 60-70 x 35-38 cm. Bracts pale brown. Corolla pale yellowish brown.
Staminodes brownish orange.

1924. Passiflora
(2)

High climbing vine. Fls. cauliflorous.
Calyx pale red. Corolla red. Coronna pinkish white. Style pale red. Stigmas whitish yellow.

COLOMBIA: El Valle. New road from Cali to Buenaventura. Boquerón. km. 50. Elev. 150 m. Forest on steep hillsides + hilltop. 30 Oct 74

1925. Cryptocentrum peruvianum (Cogn.) Ord
(2) C. Schweinf.

Epiphyte. Floral buds greenish. FRs. pale brown.

1926. Calathea sp. nov.

GH (8)

Herb on verticle rocky slopes, very abundant in habitat. Ht 2 m. Petiole 1.8–2 m. Lamina 0.8–0.9 × 0.25 × 0.3 m. Bracts green, petals yellow. Staminodes and stamen white at base, purple at apex.

1927. Calathea nidularis Smith + Idrobo
GH (3) det. Idrobo.

Herb 0.5 m. Lvs. strongly plicate, corolla pale purple. Staminodes yellowish or purplish.

1928. Renealmia aff. cuatrecasasii Maas

Herb to 2.5 m. Bracts pale green. br. green at base. Rachis green. Pedicels white. Ovary pale green. FR. orange Arils white. Calyx pinkish green.

Seed PTBG.

1929. Renealmia cernua (Sw. ex R. + S.)
A (3) Macbr.

Herb in 2° forest. to 2 m. Bracts red, apex mucronate white. Calyx pink. Bracteole pink. Corolla pink. Labellum yellow. Anther pale yellow.

1930. Calathea elegans Kennedy
(3) det. H. Kennedy 1978.

Live Hilar: died

Herb 1.5 m. Lvs. purplish beneath. Petals pink. Staminodes white. Brs. brownish purple outside, greenish within.

1931. Columnea picta Karsten Gesneriad.
(2) Herb 1 m. Lvs. red tipped. Brs. pale gr. Calyx yellow. Corolla yellow with purplish stripes (spots)
Det A. J. M. L. 1975

1932 Calathea
(1)
HK ← (A) Herb ca. 50 cm. Brs. + peduncle green. Corolla white. Staminodes white at base, dark purple at apex.

1933 Calathea aff. mishuyacu Macbr.
det. H. Kennedy, 1978.
GH (4) Herb to 50 cm. Brs + peduncle green, Fls. completely white.

1934. Clidemia killipii Gleason Melast.
det J. Wurdack 75
GH (3) Shrub 2 m. Domatia dark purple
Stem, rachis + pedicels dark purple red.
Fls. pale red, turning black.

1935 Melast.
(1) Shrub 1 m. Domatia purplish
green. Ovary + calyx red-purple.
Fls. deep blue-violet.

1936. Anthurium papayonense Engl.
GH (2) Epiphyte on rotten log. Spathe
green. Spadix reddish purple.

1937. Erythroxylum citrifolium A. St.-Hil.

GH U COL B F US

Small tree 6 m. Trunk slender 5 cm DBH. Branchlets light brown. Stipules dark reddish brown, deciduous. Lvs. firm membranaceous, med. lt. green above, pale green beneath, no areolae. Sterile.

2° hilltop forest margin along trail. Full sun. Only one tree seen.

1938. Peperomia

(2) Epiphyte herb with reddish stems, lvs. dark green above, pale green beneath. Peduncles red. Spike white, yellowish gr. in fruit.

det. M.T. Madison 1979.

1939. Philodendron ecuadorense Engler.

GH SEL-Live U (3) Climber on tree trunk. Spatho brownish. Spadix creamy white. Lvs. hastate.

GH 1940. Ryania speciosa Hook. var. chocoensis (Tr. & Pl.) Monachino

(5) Tree 8 m, 8-10 cm DBH. Sepals green-brown outside, greenish white inside.

1941. Anthurium

GH (3) Semi-erect vine, 1.5 m. Infl. erect. Spathe green. Spadix yellow.

1942. Selaginella

GH (3) Herb creeping on tree trunks.

GH? 1943. Didymochlamys whitei Hook. f. Rub.

(1) Epiphyte. Bracts pale purple. det. G.A. Steyermark XII-1975.

1944. Clidemia epiphytica (Tr.) Cogn. Melast.

det Uribe Prostrate creeping vine on tree trunks. Calyx + ovary greenish.

1945. Cremosperma nobile Morton Gesner or ~~Acanth.~~

(2) Herb ca. 50 cm. Stems reddish, lower leaf side, fls. white. det AJML

det LBSm 1975

1946. Pitcairnea cf. killipiana L.B. Smith Bromel.

GH (3) Terrestrial herb, rachis dark red, pedicels greenish purple. Calyx red to dark ~~g~~ red. Petals red. Filaments pale green.

Burmeistera cyclostigmata Donn. Sm.

1947. ~~Siphonocampylus~~?

GH (3) Shrub to 3 m. in 2° fst. margin in sm.

seed PTBG. Calyx green. Corolla reddish-purple. Style

pale purple. Stigma green. Fruits pale blue, white within.

1948. Drymonia sp. nov.? Gesner.
(2) Semi-erect herb. Lvs. dark purple beneath. Young stems, bracts + corolla with dark red hairs. Corolla red-purple.

1949. Columnea sp. nov. aff. tessmannii Gesner.
(5) Mansf. det AJML
Herb 1-2 m. Lower f. surface purple or green with purple mottling. Apex dark red. Calyx pale green. Bracts yellow. Corolla yellow.

1950 Anthurium
GH (2) Epiphyte. Peduncle ft. red → pink → brownish. Spathe ft. pink-orange, turning dark purple brown. Spadix dull green → dark purple-brown. Lvs. coriaceous.
In full sun on fallen log in chacara.

1951. Renealmia? vallensis Maas sp. nov.
Herb ca 1 m. tall.

1952. Piper
(2) Vine. Infl. light brown.
Infr. green.

1953. Piper
GH (3) Herb to 0.5 m. Spike lt. green → lt. brown.

1954. Passiflora
GH (3) Vine in chacara in fall sem. Calyx green outside, pale purple within. Corolla pale purple. Corona dark purple; androgynophore green with purplish dots. Stylodia.

1955. ~~Cyphomandra~~ Solanum
GH (3) Shrub to 1.5 m. Fls. yellowish green. Fr. margin in Jun.

1956. Heliconia
(1) Herb to 2 m. Infl. pendant. Bracts & rachis with V. brown hairs. Rachis red. Bracts red with brownish margins. Bracteals & fls white.

1957. Heliconia ~~vellerigera Poepp.~~ regalis Andersson det. L. Andersson 1984.
(6) ~~det G. Daniels 1975~~

Herb ca 4 m. Infl. pendant, petiole 1.5 m. Lamina 2.2-2.4 x 0.55-0.6 m. Rachis brownish red, hairs white. Spiral bracts brownish red (ca. 25). Bracteoles reddish brown. Fls. yellow, apex covered with brownish hairs.

1958. Heliconia
GH (6) Herb ca. 2 m. Infl. pendant. Rachis + bracts yellow, bracts strongly spiralling. Fls. yellow. Petiole 60 cm. Lamina 70 x 10? cm

Dicranopygium calimense Harl.

1959. ~~Calathea~~
GH (2) Erect shrub 2 m. Infl. green.

1960. Ischnosiphon inflatus Anderss.
GB det. Andersson

Branched herb ca. 5 m. Bracts brown, fls. yellow.

var. concolor L.B. Smith

1961. Guzmania musaica (Linden & André) Mez Bromel.
(1) Epiphyte. Cataphylls red, apex g/r. Lower brs. orange. Calyx orange at base white at apex. Scape red.

1962. Guzmania sp. Bromeliac.
(1) Epiphyte. Lvs. purple below, cataphylls red, apex green. Scape red. Lower bracts red, middle brs. orange, upper brs. yellow. Bracteoles yellow. Calyx yellow at base, white at apex.

1963. Heliconia ~~sp. nov.~~ spathocircinada Aristeg.
(4) det T. Plowman 1975
Herb 2.5 m. Bracts spiral, & rachis red, involved at apex.

1964. Xiphidium caeruleum Aubl.
(3) Herb at foot of cliff. Fls. white. Ripe frs. red orange.

1965. Costus ~~sp. nov.~~ cordatus Maas
U, COL Herb ca 2 m. tall. Bracts dark red. Callus green. Calyx & bracteoles red. Corolla pale yellow. Labellum & stamen yellow.

TYPE

1966. Phragmipedium longifolium Orchid.

live to church Selby

Herb on vertical cliff (very wet). Bracts green + purple. Sepals greenish white with yellow brown veins. Petals very pale purple brown; base green (if) yellow, hairs on column dark purple, labellum greenish yellow, pale brownish ~~mauve~~ dotted.

1967. Anthurium

(3) Herb along creek ca. 2 m. Petiole 1.4 m. lamina .67 x .48 m, cordate. spathe cream, fruiting spadix reddish purple, fr. orange.

seed!

1968. Costus leucanthus Maas x C. laevis R. + P.

Herb to 4 m. Brs. green. Calyx + bracteoles pale pink apex green. Corolla deep pink, labellum dark veins red, yellow in middle. Stamen pinkish red, apex yellow. Det. P.J.M. Maas 1978.

F

live Waimea 1981.

1969. Anthurium

TBL (1) Erect herb 1m. in swampy fst. Lvs. coriaceous. Spadix deep yellow,

1970. Philodendron

TEL (1) Climber 1 m. Lvs. coriaceous. Spathe yellow green, shiny.

1971. Xanthosoma

MDE (1) Erect herb 1 m. in swampy f st. margin. Stems corky. Spathe lt. green.

1972. Philodendron sp. (Pteromischum) Arx-

TEL GH (3) Semi erect climber 1.5-2 m. in swamp forest. Spathe pale yellow, to yellow-green.

TEL 1973. Anthurium

Semi erect herb 2 m. Spathe pale green. Spadix br. yellow.

1974. Monstera

TEL GH (2) Climber. FR. spadix white.

1975. Mapanea assimilis Koyama

Herb.

live TEL seed!

Isertia pittieri (Standl.) Standl.

1976. ~~Rubiaceae~~ Rubiac.
(3)

seed! Slender tree 8 m. fls. 6-merous, white. fr. lt. green, turning brown, baccate

1977. Utricularia pusilla Vahl
(2) det. P. Taylor 1975

Herb in streamlet near roadside. fls. yellow.

COLOMBIA: CAUCA. Rio PALO.
1175 m. 13 Oct 1974. Pedregal.

2029. Galactia
GH (4) Vining shrub. Calyx tube greyish-brown, lobes reddish. Corolla purple, frs. covered with grey-brown indument.

2030. Tephrosia sinapou (Buchoz) A. Chev.
GH (5) Suffrutex herb. Calyx greenish. Corolla white. Frs. greenish.
"Barbasco"

2031. Desmodium
GH (4) Scandent herb. Calyx reddish.
(mixed coll.) Corolla deep pink fading blue

2032. Annona
(2) "guanabana"
Tree 4m. Fls. buds green

2033. Adiantum pulverulentum L. fern.
(4) Rocky creekside · det. K.U. Kramer 1975

GH 2034. Peperomia sp.
Creeping herb on rocks. Stems reddish.

2035. Cobaea trianae Hemsley

Vine. Calyx green. Corolla green fringed with pale purple. 1400 m.

Tropiche 1460m.

2036 Erythroxylum novogranatense (Morris) Hieron.

Cultivated shrubs 0.5–2 m. tall in plot. About 12 plants in houseyard.

Lvs. yellowish green; pale green beneath, bilineate. Fls. creamy white to yellowish, long & short styled. Frs. first green, then yellowish to orange, bright red at maturity.

Grown for leaves for toothache remedy & para mascar.

2.

Grown from seedlings which literally germinate at base of parent plants.

2037 mosses on rocks along creek.
2038
2039
2040
2041
2042
2043

COLOMBIA: CAUCA. El Tambo. km. 30, 1800 m. alt. Roadside. 14 oct 1974.

2044. Renealmia thyrsoidea (R. + P.) P. + E.
A (4) ssp. thyrsoidea
Herb to 3 m. tall. Rachis dark red, bracts ~~ak~~ fallen off. Fls. pale red. Lvs. plicate.

CAUCA: Road from ~~Tambo~~ Timbío to Zoda Julio. km. 50. 2250 m. alt.

2045. Sisyrichium iridifolium HBk.
(5) det P. Maas.
Herb on road cut. Fls. white to pale yellow with brownish vertical veins, or pink purple with purplish veins.

2046. Croton

GH (3) Tree 15 m. Calyx pale green. FRs. brownish yellow. Fls. creamy yellow.

MO 2047. Cestrum

GH (5) Small tree 5 m. FR. black.

~~BIRMK~~

Km 52. 2300 m. Disturbed forest.

2048. Piper

GH (5) Hanging shrub 1-2 m.

2049. Tillandsia biflora R. + P. Bromel.

U. (1) det L.B. Smith 1975.
Epiphyte. Lvs. + bracts green + tinged purple. Rachis, pedicels + bracteoles pink.

U

COL 2050. Pelicourea Rub.

GH (3) Treelet 4 m. Rachis + pedicels dark red. Fls. magenta.

2051. Solanum tetrapetalum Rusby

GH (4) det A. Child 1975
Vine. Fls. white. Fr. green maturing orange.

2052. moss.
on clay roadside.

2053. Peperomia
(2)
Fleshy epiphyte. Peduncle red.

2054. Cavendishia divaricata A.C. Sm. Ericac.
det. J. Luteyn 1976. ! 1982
GH (5)
F. Treelet 4-5 m. Brs. green. Rachis & pedicels dark red. Fls. green ripening reddish. Corolla pale purplish-brown, fleshy.

2055. Killipia dendron columbianum Kobuski / Flac.
det. H. Sleumer 1977.
GH (4)
U. Tree 8 m. Frs. green.

Km. 54 from Timbío. 2450 m.

2056. Meriania maxima Mgf. Melast.
det. J. Wurdack 75
GH Tree 5 m. Corolla & stamens pale to dark red-purple. Calyx purplish

brown with greenish tinge.

2057. Epidendrum fimbriatum HBK. Orchid.
Ames (3) Terrestrial herb along roadside.
Fls. white, dotted with purple.

Km. 56 from Timbio. 2500 m.
Forested quebrada.

2058. Diothonaea Orch.
Ames (3)
Photo Epiphyte. Calyx + corolla brownish pink. Labellum deep dark red.

2059. Centropogon solanifolius Bth. Campan.
GH (1) Herb to 1.5 m. Corolla orange-red.

2060. Burmeistera sp. Campanul.
GH (3)
Herb 1.5 m. Calyx green. Lobes purplish brown. Corolla dark green-purple toward centre.

2061. Burmeistera variabilis (Gleas.) Wimm. Camp.
(3) Herb 1 m. Calyx + corolla green.

2062. Anthurium
GH (3) Terrestrial + subclimber herb to 2m. Spathe light green; ♦ spadix brown. Lvs. rugose.

2063. Piper
GH (4) Epiphyte & terrestrial subshrub, Spikes white.

2064. Hymenophyllum trichomanoides v.d. Bosch Hymenophyll-
GH (3) det K.U. Kramer 5-1976
Epiphytic fern.

2065. Asplenium rutaceum (Willd.) Mett.
GH (3) Epiphytic fern on tree trunk
det. K.U. Kramer 1975

2066. Asplenium harpeodes Kunze
(2) Epiphyte fern on tree trunk.

2067. Alloplectus meridensis Klotzsch ex Hanst. Gesner-
(3) Herb ca. 50 m. Lower bracts green. Upper bracts red.
det A.J.M. Leeuwenberg 1975

2068. Policourea Rubiac

GH (1)

Shrub 3 m. Rachis + calyx + pedicels deep red-purple. Corolla pink violet.

(A) → K

2069. Diplazium

GH (6)

Terrestrial fern. Lvs. 2 m. long. Petiole 0.5 m.

2070. Anthurium

(2)

Climber 4 m. Spathe deep red. InfR. pendant; spadix green turning brown.

2071. ~~[illegible]~~ ? Juanulloa cf. speciosa (Miers) Dunal

Live (8)

GH
MO
~~BIRM~~ K

Epiphytic shrub 5 m. on fallen log. Calyx light green, inflated in fruit. FR dark green.

(A) → K

2072. Mosses.

2073. Equisetum bogotense HBK.
det KUKramer 1975

Herb growing in + along stream

ferruginea Maas

2074 Renealmia ~~Kilocarpa~~

TYPE

U Herb to 3 m. along creeks + steep slopes.
COL Bracts orange-red. Rachis pale red.
GH Ovary rusty orange. Corolla and labellum white, anther pink. FR. rusty orange.

2075. Hypocyrta sp. nov. aff. H. illustris Gesn.
(4) Shrub 1 m. Calyx yellowish white. Corolla white.

2076. Aphelandra acanthus Nees Acanth.
GH (3) Shrub 4 m. Bracts green. Corolla yellow. det P.J.M. Maas 1974

Km. 56. Alt. 2500 m. Steep rocky roadsides. 14 oct 74.

2077. Passiflora apoda Harms
GH (6) Vine. Calyx + corolla greenish white. Corona base purplish, apically greenish. FR. green. det. P.M. Jörgensen 1984

2078. Viola
GH (3) Herb. Stems + stipules, lower leaf side reddish. Corolla white streaked purple.

2079. Epidendron Orchid.
(2) Terrestrial orchid. Calyx, corolla + labellum yellowish brown.

2080. Centropogon solanifolius Bth.
(3) Suffruter 1.5 m. Lower leaf surface dark red. Calyx green. Corolla orange-red.

2081a Gesneriad

2081. BURMEISTERA KILLIPII GLEASON Campanulac.
DET. B. STEIN 1987
GH (3) Scandent shrub with milky latex, 2 m. Ovary deep reddish purple. Calyx green below, reddish purple above. Corolla tube pale greenish purple, lobes identical but inside reddish purple. Stigma pale green. Berries white apically tinged with violet.

2082. Begonia killipiana L.B. Smith + Schubert
GH (6) Herb to 1 m. Lvs. reddish below. Stipules dark red. Bracts + rachis + peduncels bright red. Sepals yellowish.
det. Schubert 1975.

2083. Burmeistera sp. Camp.
(2) Herb 0.5 m. Pedicels, ovary, calyx + corolla dull reddish purple. Stamen tube pale green, dark purple at apex.

2084 Piper
GH (3)
Shrub 1.5 m. Spikes lt. green.

2085. Gonzalagunia discolor Standl. var. discolor Rub.
GH (4) Shrub to 75 cm. Stems, calyx Corolla tube reddish. Corolla lobes white. Fr. fleshy, pink.

2086. Podandrogyna
GH (3)
Shrub to 1.5 m. Calyx green, Corolla orange-red. Fr. greenish.

2087. Besleria ventricosa Morton Gesner.
(4) det. A.J.M. Leeuwenberg 1976.
Herb to 50 cm. Corolla orange.
Berries orange.

2088. Pilea sp. nov. Urticac
(3) Scrambling shrub. Fls. pale greenish. det. Utrecht 1980.

2089. Tropaeolum
(2) Vine. Spur and pedicel deep pink. Tepals green.

2090 Moss - Epiphytes.
2091 Moss
2092 Moss
2093. Moss.
2094 moss.
2095 moss
2096 liverwort
2097 liverwort
2098 Thuidium
2099 liverwort

COLOMBIA: CAUCA. km. 54 from El Tambo to Veinte de Julio. 15 Oct 74. 2100 - 2300 m.

2100. moss
2101. moss
2102. moss.

2103. Pleurothallis Orchid.
Cal (1) Epiphyte. Fls. yellow. Hillside fot. 2100 m.

2103A - Philodendron
(1 live only) Climbing vine on roadside.

2104. Anthopteris oliganthus A.C.Sm. Ericac.
(4) Scrambling shrub 2 m. Calyx red, apex green. Corolla red, throat green, lobes white. Det H. Sleumer 1975

2105. Brassia? Orch.
Jones (4)
On Dead log on ground. Sepals + petals white at base, yellow above, purplish brown dotted. Labellum white at base, apex yellow with purple dots. Fls. fragrant.

2106. Guzmania gracilior (André) Mez Bromeliac
GH (4) Cespitose herb on rocky hillside. Lf base purple. Rachis dark red, bracts + cataphylls green, basal part red, pedicels, bracteoles + fls. yellowish green Det LB Sm 75

2107. Palicourea Rubiac.
GH (4) Shrub 1.5 m. Rachis + pedicels orange. Ovary purple. Corolla yellow-orange.

2108. Philodendron multispadiceum Engl. Arac.
(3) Climber. Spathe green below. Yellow orange apically. ♂ fls. pink. ♀ fls. green. det. S. Mayo 1976.

2109. Hypocyrta sp. nov. Gesneriac.
(3) Herb 1m. Lvs. yellow-green with red veinlets beneath. Stems + petiols with red hairs. Calyx greenish with red hairs. Corolla yellow with white hairs, red hairs at apex.

2110. Columnea dimiata Gesner.
(2) Herb 1.5 m. Lvs. dark purple-red below with 2-4 red dots towards apex. Bracts dark purple, calyx green, purplish at base. Corolla tube red, lobes yellow with purple in center. Det. A.J.M.L. 1975

2111. Oncidium superlirens Lindl. Orchid.
(2) Herb along roadside. Infl. pendant 2 m. Sepals brown with greenish yellow margins. Lateral petals white, brownish striped. Labellum brownish purple with white apex. Callus white.

2112. Anthurium

GH (2) Epiphytic ~~shrub~~ herb. Petioles peduncle + spathe red. Spadix orange.

steyermarkii (Harl.) Harl.

2113. Sphaeradenia Cyclanth.

GH (4) Root-climbing liana, leaf base red. Infl. red. Seeds purple turning brown. det. H. Snelders 1975

211f. Pilea sp. nov. Urticac.

(4) Scrambling Shrubs. Fls-greenish. Rachis, pedicels + leaf veins on lower surface pale red. Open habitat. det. Utrecht 1980.

2115. Psychotria Rubiac.

GH (4) Shrub to 3 m. Rachis + pedicels deep yellow. Calyx + corolla pale yellow. Ovary white. FR. green maturing blue-black, rachis + pedicels dark blue in fruit.

2116. Besleria villosa Fritsch Gesner.

(5) Herb 2 m. Corolla orange. Ripe fruit ~~black-colored~~ Seeds ~~white~~ Creamy white. white.

AJML Aft.

2117. Besleria angustiflora Fritsch Gesner.
6) Herb 1m. Corolla orange. fr. flesh colored. Seeds red. Hillside fst.
det A. J. ML 1976.

2118. Anthurium
GH US (4) Erect terrestrial herb 1m. Costa, lateral nerves + margin red beneath. Spathe + spadix red.

2119. Pleurothallis sp. Orchid.
(3) Terrestr. herb. Sepals, petals + labellum dark purple brown.

2120. Stelis purpurea (R. + P.) Willd.
GH Ames (3) Terrestr., sepals greenish purple. Labellum dark purple.

2121. Lycopodium
GH (3) Herb on steep bank.

2122. Lycopodium reflexum Lam.
GH Herb on steep roadbank.

2123. Stelis
(3) Terrestr. Sepals greenish purple, labellum purple.

2124. Gunnera

GH (4) Herb along rocky roadbanks. Petiole to 50 cm, Petiole nerves + lower lf. reddish, lamina 85 cm diameter. Infl. deep red.

aff. M. setosa Wurdack

2125 Miconia sect. Amblyarrhena Melast.

GH (6) Shrub or treelet to 2 m. with dark purple indument. Petals white. FR. dark purple black.

2126. Harmsx Solanac.

GH (4) Subshrub 50 cm. Fls. dull yellow. Frs. still green.
BIKIN
MO

2127. Centropogon Lagotis Wimm. veloff. Campanul.

GH (3) Shrub 2 m covered with ferruginous hairs. Corolla red-orange, stamen column Creamy white.

2128. Lycianthes profunderugosa Bitt.

GH (4) Prostrate creeping herb on steep or flat roadbanks. Fls. pale violet with purple nectar guides.

det M. Madison 1977.

2129. Stenospermatium popayanense Schott Araceae
GH US (4) Herb on steep rocky hillside. Spadix creamy white. Spathe pale green maturing dark brown.

2130. Hepaticae

2131. Heliconia venusta Abalo & Morales
GH U (3) det. L. Andersson 1984.
Herb on steep rocky hillside. Bracts & rachis red. Pedicel, ovary & fls. yellow. Apex of fls. green.

2132. Monnina cf. glaberrima Chodat
GH (3) Weak scandent shrub to 1.5 m. Calyx purple. Corolla blue-violet. Frs. light green.

2133. Begonia tiliifolia C.DC.
GH (5) det. L.B. Smith 75
Herb to 58 cm. Bracts pale green. Corolla white

2134. Gonzalagunia
GH Shrub 1 m. Calyx greenish. Corolla white.

2135. Peperomia
Herb: stems, petioles + spikes pale green with purplish shaded markings.

2136. Alloplectus sp. nov. aff. Congestus Linden Gesneriad.
Herb 1m. tall. Bracts red.
Fr. ⇒ reddish yellow.

2137. Utricularia jamesoniana Oliv.
(2) Epiphyte on deep bog. Calyx greenish purple. Corolla white, purple towards apex.
det. P. Taylor 1975

2138. Anthurium
GH (3) Herb 0.5 m. Peduncle + spathe
US light green. Spadix purplish black.

2139. Peperomia
(2) Herb. Stems + spikes dark red.

2140. Pilea Urticac.
GH (4) Scrambling herb. Fls. creamy white. Lvs. pale green.

(x) 2141. Campanea affinis Fritsch Gesneriad.
Live (8) Herb to 1m. Fls. pendent. Lower
SEL lf. surface reddish or greenish with
VEN whitish veins. Corolla white
F at base, tube pinkish; lobes
yellowish green with purple dots.
Inner side of tube white with
pink spots.

2142. Eschweilera Lecythid.
GH (11) Treelet 3m. to 10 cm DBH. Infl.
pendent. Rachis lt. green. Petals
violet. Stamens yellow.

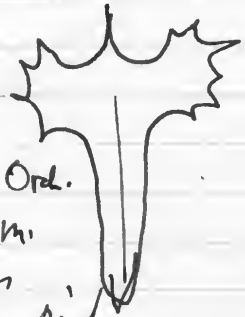
2143. Calathea timothei H. Kennedy sp. nov.
GH (11) Herb to 3 m. Bracts red with
reflexed apex. Corolla & staminodes
yellow. Calyx hyaline, apex of lobes
pink. Bracteoles yellow at base,
red at apex. 2100 m.

2144. Bomarea?

Vine; sepals deep pink. Petals
greenish at base, pink apically.
Filament pink. Anthers grey!

2145. Piper
(1) Shrub 1 m. Lvs. shiny. Spikes light brown.

2146. Anthurium
Large terrest. herb. Immature spathe pink.



2147. Orch.
(1) Terrestr. herb, 0.75 m. Lower lf. sides & stems dark purple. Ovary pink. Fls. yellowish.

2148. Orchid.
Terrestr. cespitose herb. Fls. white with yellow spot in middle. Rachis green. Bracts pale green.

2149. Psammisia sp. Ericac.
(4) Shrub 50 cm. Pedicels & calyx red. Corolla red at base, green at middle, white above.

2150. Maxillaria Orchid.
Ames (4) Epiphyte - Fls. yellow.

2151. Lycopodium cernuum Curvatum Sw.
GH (4) det MT Murillo 75
Long-creeping herb on steep rocky hillsides.

2152. Renealmia aff. ferruginea
(16) Herb to 3 m. Frequent.

2153. Renealmia caucana Maas
A Isotype det. T. Plowman 1975 (TYPE)
U Herb 3.75 m. tall. Lvs. 30-plicate.
COL Radius bracts + bracteoles red. Calyx
F red. Corolla + labellum white. Pk.
GH red.
K
NY

COLOMBIA: CAUCA. 20 de Julio.
Alt. 2000 m. 15 Oct 1974.

2154. Solanum

GH (3)

Prickly vine with brown hairs.

Iwe-Mo Frs. shiny green maturing bright red-orange.

2155. Anthurium

GH (5) Climbing herb on tree trunk.

F Spathe yellow green. Spadix dark

US brown, pale brown in fruit.

2156 Aegiphylla odontophylla Donn.-Sm.

U (4) Shrub 2 m. Corolla creamy

GH white. Overhanging cl. fl.

CL det. H.W. Moldenke 1976

2157. Marcgravia Marcgraviaceae

GH Liana in Cecropia tree

Infl. green.

Colombia: El Valle.
16 Oct 74. km. 31 from Cali on road to Popayán.

2158. Canna glauca L.

GH

Herb to 2.5 m. Rachis + bracts green. Fls. pale yellow.

2159. Nymphaea amazonum Mart. et Zucc.
det. J. Cramer 1975

Stagnant pool. Petiole purplish pink at base. Fls. greenish.

COLOMBIA: Dept. El Valle. Municipio Tuluá. Corregimiento Mateguadua. Inspection de Policia. Alt. 3800 ft.
4280 23 Oct 74. Along Rio Tuluá.

4280. Passiflora arborea
(4)
Col Tree 10 m. tall. Trunk 20 cm. DBH. Frs. green with tan colored scurfiness. In cafetal.
(A) → K

4281. Renealmia?
(3)
Col Pas. Herb 1.5 m. tall on riverbank. Sterile.

4282. Erythroxylum ulei O.E. Schulz
Col
(A) No photos. Treelet 3 m. tall in partial shade in cafetal near house. Twigs dark brown. Lvs. medium dark green above, shiny. pale green beneath dull. No lines or areolae present. Pedical light green. Calyx lobes yellowish. Corolla creamy white to greenish. Stigmas bright green. FRs. shiny, lt. green, falcoid.

A straggly plant attacked by Loranthaceae.

4283. Erythroxylum hondense

Col Pas

Photo with Phanar! + closeup with tapemeasure.

~~Ent~~ shrub 1.5 m. tall along road in cafetal. Young leaves bright yellow-green. Older lvs. medium to dark green, dull above, the major lateral nerves slightly raised. Dull pale green beneath, the areolae slightly paler, but no distinct lines. Sterile!

4284. Erythroxylum orinocense HBK.

PSO

Col Pas

Photos with 3 men - Closeup on cement.

(A)

Tree 6-8 m. tall with wide spreading crown. Trunk 15 cm DBH. Lvs. light to dark green above, somewhat shiny, lat. nerves slightly prominent. Pale green beneath with vaguely paler areolae region no lines. FRS. pale green. ~~with~~

scarcely falcoid. In fullsun.

4285. Erythroxylum ~~tondense~~ orinocense

Col

Close up of branch of concrete with fls.

(A)

Tree 8 m. tall. Trunk 15 cm DBH. In shade in cafetal along river. Lvs. bright yellow green, (Tw. gs greyish brown) lateral veins prominulous above, dull. Lvs. pale green beneath, dull, with vaguely discernible paler areolae, no lines. Pedicel light green. Calyx lobes yellowish green. Petals creamy yellow to greenish, corona white. Filaments creamy white. Styles green.

4286. Erythroxylum orinocense ~~tondense~~

Col

Photos.

Slender shrub 1.5 m. tall on rocky cliff along road. Young plant, sterile. Lvs. med. green above, pale green beneath with no apparent areolae.

Alt. 3400 ft. Jardin Botanico
Arboretum

4287. Erythroxylum orinocense H.B.K.

Col ~~fas~~ PSO

photos (A)

Slender (spindly)
Shrub or treelet 4-5 m. tall.
DBH 6 cm. trunk. Alluvial bottom land along river. Plants left from original vegetation. Twigs greyish brown.
Lvs. bright yellow green when young, becoming dark green, somewhat shiny above with prominulous lat. nerves; pale green, dull beneath, with slightly concave areolae region, but scarcely different in color. Lvs. rubbery when maturity, stiffish.
Pedicel green. Calyx yellow-green. Petals greenish, corolla white. filaments white. Styles green. Fruits shiny, pale green.

3 plants seen.
Use: hard wood used for making poles + posts.

4288. Erythroxylum novogranatense
"coca"

Cd ~~Pa~~
PSO

Cultivated. Spreading shrubs 3 m. tall. Lvs. bright yellow green above, pale green beneath. distinctly bilineate with paler, yellower areolae.

(A) photos

Calyx yellow-green. Corolla creamy white. FRs. light green to yellowish (immature).

COLOMBIA: CAUCA. 11 km. N. of Popayan. 1800 m. 26 Oct 1974. Steep hillside along stream. With Wade Davis.

4289. Elaphoglossum
(4)
Col Fern.

4290. Siparuna
(3)
Col Tree 6 m. along river. Frs. pendant, dark red.
A → K

4291. Philodendron
(1) Climber. Spathe pale green.

4292 Calliandra?
Col (3)
Treelet on hillside. Infl. cauliflorous, peduncle short. (5-10 mm). Calyx pale pink. Filaments deep pink.
A → K

4293. Euphorbia
(2)
Col Shrub 1.5 m. Milky latex. Gamthea light green.

4294. Anthurium elegans
(3)

Col Terrestrial herb. Petiole to 1.5
Live → Selby. m. long, Spathe light green.
D Fernandez Spadix deep purple, bright
(A) → K red orange in fruit.
(= Plowman 13001)

4295. Renealmia LIGULATA MAAS
DET. P.J.M. & H. MAAS 1989

(A) Herb 3.8 m. tall along
seed to PJM stream in forest. Infl. axis is
Col short bright pink. Fruits deep car-
mine red.

COLOMBIA: CAUCA.
Hesmita near Rio Hesmita;
Rocky quebrada along road
from Popayan-Pasto, 34 mi. South
of Popayan, 9 mi. N. of Piedra
Sentada. Alt. 3500 ft. 27 Oct 74

4296. Renealmia occidentalis (Sw.) Sweet
(7) var. occidentalis
seed to PJM Herb 3.7–4 m. tall; in par-
(A) tial shade along Quebrada. Large
Col Pas clump. Peduncle dull reddish
green. Infl. axis dull red.
Pedicels, ovary + calyx
dull red. Corolla bright yellow.
Staminode pale yellow. FR. bright
red. Very aromatic.

4297 Gymnopteris rufa (L.) Bernh. fern
(3) Terrestrial fern on hillside
Col in forest along quebrada.
det. M.T. Murillo 1975

4298. Acalypha
(2) Treelet 4 m. tall. Infl. light
Col green, pendant.

4299. Solanum
(3)
Roadside weedy shrub 3 m
col FRS. dark green turning
yellow.

4300. Peperomia
(2)
col Sub Succulent terrestrial herb.
Infl. creamy white.

COLOMBIA: Dépto. Cauca
4 Mojarras. 1.7 mi. N. of Mojarras on road to Popayan. Alt. 2200 ft. 27 Oct 1974. Caño along road.

4301. ~~Erythroxylum haughtii Gentry~~ (stet)
Col PAS (23)

Shrub 1 m – 4 m. tall in secondary woods along sandy caño. Trunk to 7 cm. at base. Bark greyish brown, longit. cracked. Branches spreading.
photo (A)
soil Inc-A1
seeds: F
Leaves dark green above, dull, pale green. Areolae region variably distinct, paler green. (= 10957)

4302. Leg.
Col (3)

Treelet to 5 m. Calyx + Colla bright orange-red.

4303.
(2)

Col Shrub 2 m. tall. Frs. green.

4304 (2) Acalypha

Col Shrub 2.5 m. tall. Infl. erect, light green.

→ Ant Association!
Atta cephalotes (L.)
det. E.O. Wilson 1975

4301-A. Ants → F

PSO

COLOMBIA: Dept. Cauca
1.6 mi. north of Mercaderes, on road to Popayan. Alt. 3900 ft.

4305. Erythroxylum ~~boughtii~~ rinocense H.B.K. Gentner

Col

fotos. Slender shrub 1-5 m. tall in thickets along Quebrada (usually dry) in pasture.
Lvs. dark dull green above, pale green beneath.
Frts. light green.
pale
Virus-infected new leave,

COLOMBIA: Putumayo. Road from San Francisco ~~Saturday~~ to Mocoa. Km. ~~[illegible]~~ 79
Alt. 8500 ft. 30 Oct 74. 2° forest.
with Wade & Pedro Juajibioy.

4306. (3) Cyclanthus bipartitus? Cyclanthac.

seed (A) SOL. Terrestrial herb. Petiole 120 cm. Blade 100, bipartite. Inf. 1 red. Very frequent.

4307. (1) Orchid.

(B) Terrestrial on steep bank — reduct. Ovary, corolla, calyx pale magenta, lip with bright yellow-orange spot in center.

4308. (3) Solanum aff. muricatum?

Col Vine in thicket along road. FRS, light green, turning black.

4309. (1) Generiid.

Weak shrub 1 m. Calyx deep carmine red. Corolla cream at base orange in middle, red orange toward apex.
forest.

4310. Orchid.
(3)

(A) Epiphyte. Infl. long, branched,
Lima 2 m. with bulbils forming. Ovary
Col green. Sepals + petals yellowish
brown, with (or occasionally) yellow
stripes. Column lavender. Capsule bright
yellow green.

4311. Gesneriad.
(A) (1) Herb 1-2 m. Lvs. dk. green above,
red-purple beneath. Bracts bright
yellow, edged lt. green. Corolla pale
yellow with red fringed lobes. Forest.

4312. Columnea aurantiaca
(3)

Col Pas Subshrub, scandent, on steep hillside.
Pedicel reddish purple. Calyx greenish
yellow. Corolla orange, lobes deep
yellow. Filament + style lt. yellow.
Fr.

4313. Monnina
(3) Shrub 2 m. tall. Petals blue,
Col Pas keel yellow. Frs. dull yellowish-green.

4314. Begonia
(3)
Col Pas Herb in forest to 1 m. Ovary and perianth deep pink-red. Stigmas yellow. Frs. red. Lvs. purplish red beneath.

4315. Fuchsia sessilifolia Benth.
(2) Shrub 2 m. Stem + costa beneath reddish. Ovary purplish red.
Col Hypanthium deep pink. Sepals greenish yellow. Petals scarlet. det. P. Berry 1983.

Colombia: Putumeyo. Road from ~~San Francisco~~ Sibundoy to Mocoa, km. 83 from Pasto. Alt. 8500 ft. Roadside roadcut.

4316. Calceolaria
seed (4)
Col Pas Herb to .7 m. Corolla pure white.

4317. Orchid.
(vivid)
Terrest. on steep cliff. Perianth salmon pink, paler towards center. Solitary fls.

4318. Orchid

live (2) (A) Terrest. on steep bank along roadside. Rachis + bracts yellowish brown. Sepals pale yellowish brown. Petals pale yellow. Labellum pale yellow Column pale green.

col

~~4319~~

COLOMBIA: PUTUMAYO: Road between ~~Sibundoy~~ San Francisco + Mocoa, km. 92 from Pasto. Los Monos. Alt. 7200 ft. Rocky quebrada 30 Oct 1974

4319. Renealmia

Col Pas

~~Amomum~~ Herb 3.5 m. tall along rocky quebrada in thicket. Bracts + Rachis + pedicels pink-orange (pale salmon). Bracteoles red. Ovary dull golden yellow (ochre). Calyx red. Corolla white. Staminode white. ~~Stigma~~ ~~Stamen offset~~. deep pink. FRS. dull red to dull greenish brown at maturity.

foto

seed PTBG

Bomarea

4320. Alstromeria?

(2)

Col Twining vine on road bank. Ovary green. Sepals red abaxially with yellow-gr. spot near apex, yellow orange, adaxially. Petals yellow orange with medial red stripe abaxially, ; lateral black spots adaxially; acumen dark red. Filaments pale yellow, pollen blue.

4321. ' Rubra.

(3)

Seed Shrub 2 m. Ovary green.

Col, Pas Calyx lobes red. Corolla tube red-orange, lobes deep yellow within. FR- red.

4322. Anthurium

(1)

LIVE. Semi-erect herb to 1 m. Spathe pale green. Spadix pale yellow.

4323. Centropogon

2

(A) Herb or vine 2 m. Pedicels gr. with dark purple hairs. Calyx tube dark purple, lobes gr. adaxially.

Col Corolla deep red-orange.

(A) → K

Dunalia

~~Iochroma gesneriides~~

4324. ~~[illegible]~~ Solanae.

(A) → Kew (3) Weak tree 5 m. tall. Corolla yellow.

Col Pas

(A) → K

4325. Solanum hirsutissimum Standl.

Col Pas (3) Vine with succulent stems (triangular) and lvs. Corolla white. Frs. yellowish-green.

4326. Solanum

(4)

Col Pas Spindly shrub 4 m. tall. Fls. white.

4327 Fuchsia verrucosa Hartweg ex Benth.

(3) det. P. Berry 1983.

Col Pas Slender shrub 2 m. Stem red. Pedicel reddish. Ovary green. ~~Fls.~~ Calyx + Corolla orange-red. Pedicel semi erect.

4328. Fuchsia scabriuscula Benth.

(A) (3) det. P. Berry 1983.

seed Col Slender Shrub 2 m. Pedicel + ovary reddish green. Hypanthium + Calyx deep scarlet. Petals pinker-red. Frs. parasitized, yellow-green.

4329. Solanum juglandifolium Dunal
(3) det A. Child 1975.

Col Herb. Vine, high climber. pale
Cor. lia yellow. Frs. hard & brown
at maturity, roughish.

4330. Solanum
(4)

Col Pas Weak tree 6 m. tall. Corolla
White.

4331. Solanum
(1) Tree 5 m. tall with hard wood.
Lvs. silvery beneath. Frs. pale
green.

4332. Jesner.
(3) Herb 1.5 m. Calyx ~~Bract~~ red orange;
Col Pas. Pale cream within. Corolla tube
pale yellow below, deep ochre above,
lobes dark purple.

COLOMBIA: Putumayo. ~Km. 100 from Pasto along road from ~~[illegible]~~ San Francisco to Mocoa. 6400 ft. alt. 30 Oct 1974.

4333. Renealmia LIGULATA MAAS
(3)
DET. P.J.M. & H. MAAS 1989

(A)

Col

Herb on roadbank, 3.65 m. tall. Infl. axis deep carmine red. Bracts + bracts reddish turning brown. Ovary pink. Calyx + fruit deep red. Corolla + staminode pure white. Stigma pink at apex

4334. Bromeliad.
(3)

Col Pas

Terr. Herb on steep roadcut. Bracts red, bracteoles red-orange. Calyx bright yellow. Corolla dull creamy yellow

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COLOMBIA: Putumayo. Km. 108. Alt. 7000 ft.

4335. Cappar.

Col Pas

Herb 1.5 m. tall along road at Quebrada. Infl. axis lt. green. Pedicels reddish. Petals yellow-orange. Fr. bright yellow.

Km 112. Alt. 7200 ft. 31 Oct 1974

4336. Renealmia

Cd

Herb 2 m. tall on roadside at edge of steep cliff. Open place. Same as 4319.

4337. P. peu

Col Pas (5)

Shrub 1.5 m. tall. Spikes light brown.

4338. Solanum

Col, Pas (4)

Shrub 1.5 m. on roadside. Corolla White. Frs. dark green

4339. (1)

Camp.

Herb on steep bank. Stem + lvs. purple. Ovary, calyx + corolla greenish purple

4340.

Coppar.

Col Pas, (4)

Shrub 2.5 m. tall growing next to waterfall. Petals bn red-orange. Frs. pale green

4341. Melast.
Seed 4)
Col Pas Shrub 0.5 - 1.5 m. tall. Petals white. Fr. red at maturity.

4342. Legum
(5)
Col Pas Tree with ~~Flat~~ crooked branches, 3.~~5~~ m. tall on exposed slope. Filaments white. Calyx green.

4343. Solanac.
(4) Herb to 1.5 m. along waterfall. Corolla yellowish-green.
Col Pas. Frs. green.

4344. Solanum
(3) Trailing herb on decumbe.
Col Pas Corolla pure white. Frs. green, persistent.

4345. Solanum
(4) Trailing herb on decumbe.
Col Pas Corolla violet. Frs. green, abscising very easily.

4346. Solanum
(4) Herb along quebrada 1.5 m.
Col Pas tall. Corolla white. Frs. green.

4347. Campan.
(3)
seed Herb to 2 m. tall. Calyx
Col Pas lt. green. Corolla greenish
white. White latex.

4348. Fuchsia cuatrecasasii Munz
Col Pas (4) det. P. Berry 1983.
seed Shrub 1 m. tall on steep
hillside. Stems red purple.
Hypanthia + sepals scarlet.
Petals orange-red. Ovary
deep reddish purple.

4349. Urtica
(4)
(A)
Col Pas Subshrub 1 m. hanging
branching on steep cliff. Fls.
greenish. Frs. cream white.
(A) ? K

4350. Monnina

Col Pas (4) Shrub or treelet 3 m. tall on open slope - infl. axis deep purple. Corolla blue-~~violet~~ purple, keel yellow. Frs. red-purple.

4351. Lycopodium jussiaei Desv.

Col Pas (5) Creeping herb on steep road banks.

4352. fern.

Col Pas (5) Fern on steep road cut.

4353. Dicranopteris?

Col Pas (4) fern on steep road cut.

4354.

Col Pas (5) small fern on steep road cut.

4355. Pityrogramma

Col Pas (5) Fern on steep road cut. Underside of lvs. bright yellow.

4356.
(3) fern with long hanging
Col., Pas lvs. on steep road cut.

~ Km. 121 Alt. 5400 ft.

4357 Tropaeolum
(A) (3) Herbaceous vine hanging
Col from tree on steep hillside.
Hypanth. tube deep pink. Lobes
greenish-yellow. Petals black.
Filaments black.
(A) → K

Km. 128 . Alt. 4400 ft.
(Near derrumbe)

4358. Browallia speciosa
Col, Pas (4)
(A) Herb on mossy wet road cut.
Corolla light blue-violet.
(A) → K

4359. Selaginella
(3) Herb on mossy hillside
Pas Col (road cut) -

4360. Spiranthes

(4)

live? Herb on wet mossy hillside

(A) Fls. white.

Col, Pas

Colombia: Putumayo. Mocoa.
2000 ft. Alt. Rio Tarruca. 2 NOV 74

4361. Renealmia alpinia (Rottb.) Maas

seed det PJM Maas. 1975.

(A) Herb 3 m. tall along stream.

Col Pas Infl. 1 m. tall. Infl. axis,

seed PTBG pedicels + frs. pale red.

Mature frs. black. Bracts pink

Bracteoles pale pink. Ovary pink. Calyx ~~pink~~ yellow.

Corolla + Staminode yellow.

4362. Apocyn.

Col (2)

Herb. vine along river. Corolla pale green.

4363. Corchorus orinocensis HBK.

Col, Pas. N.V. "té"

Cult. shrub 1 m. tall in

homeyard. Fls. dull yellow; Frs. dark brown.

= Plowman 10818

(F) Use leaf as a beverage + for carminative.

Cult. Waimea

Arb. 7451893.

COLOMBIA: PUTUMAYO. MOCOA.
650 m. 2 Nov 1974.
Along Rio Mocoa, ca. 2 km. N. of Mocoa.

longebracteolatus Maas
4364. Costus ~~sp. nov. Maas.~~
(A) det P. J. M. Maas 1978
Col, Pas Herb 3.8 m. tall. Lvs. + stem green. Petiole red. Infl. basal. Peduncle dark red. Bracts dark olive green, abaxially, deep red adaxially, fleshy. Ovary white. Calyx red. Corolla hyaline whitish-pink. Staminode reddish-maroon. White striped outside, inside with yellow median. Stamen maroon.

4365. Grias neuberthii Macbride
Col, Pas det Scott Mori 1975
(A) → NY Tree 10 m. with trunk 25 cm DBH. Fls. cauliflorous, dull yellow. Frs. brown.

4366. Costus scaber R. + P. (det. PJM Maas 1975.)
(A) Herb 1-2.5 m. tall. Infl.
Col, Pas term. Bracts red-orange to yellow-orange. Ovary white. Calyx red. Corolla yellow-orange. Staminode

red-orange.

4367. Renealmia nicolaioides Loes.

(A)
Seed
Col Pas.

Herb. 5.5 m. tall. Lvs, 1 m. long. Infl. to 1 m. tall. ~~Ovo~~ Frs. green; Calyx fleshy, deep. yellow-orange. Aril's br. orange.
Fls: Bracteole pale pink-orange. Calyx pale yellow. Corolla tube pale creamy yellow, lobes reddish. Staminode fleshy, yellow.

4368. Gurania

(A)
Col

Vine 5 m. tall. Infl. cauliflorous. Pedicel lt-green. Ovary orange. Corolla fleshy, red-orange.

4369. Cyperac.

Col Pas

Herb 1.5 m. tall in open field along stream.

4369-A. Anthurium

~~Col~~ (1) Epiphyte. ~~[illegible]~~

s

Heliconia stricta Huber det. L. Andersson 1982.

4370. Heliconia cf. humilis
det. G. Daniels

(A) Herb 1-2 m. tall.
Col Peduncle green. Bracts br. red-orange, costa + margin green. Bracteoles white. Calyx white. Corolla white, green apically.

4371. Piper

Col Pas Shrub 1.5 m tall. Spikes light brown.

4372. Cyphomandra

(A) Tree 4 m. in pasture.
Col Pas Fls. pale yellow green + green.

4373. Campan.

Col Pas Shrub 1.5 m. Calyx green.
Serv Corolla light pink, pale green at apex.

4374. Gesner.

Col Pas

Herb 1 m. tall on wooded hillside. Corolla red, yellow within. Lobes red with dark purple brown spots.

4375. Monstagua Marant.

Col

Herb 1.5 m. Bracts light orange. Calyx orange. Petals & staminode hyaline white.

4376. Rutac.

Col Pas

Treelet 4 m. Fl. greenish yellow. Stem with odor of orange

4377. Gesneriac.

Col Pas

Herb. vine in thicket. Calyx green. Corolla cream. Fr. lt. green, red within.

Live: Waimea 1981!

COLOMBIA: PUTUMAYO.

Río Rumiyacu. Alt. 2000 ft.
km. 142. 3 NOV 1974.

4378. Banisteriopsis rusbyana
Col Pas "chagropanga"
Cult. Woody liana 5-6 m. Lvs.
dark green above, shiny-
"pinta"

4379. Banisteriopsis caapi
Col Pas "yage"
Cult. Vine 3 m. Lvs. med. green.

4380. Peperomia
Col Pas
Herb. vine 4 m. tall
hanging from tree. Spikes
creamy white to yellow,
becoming greenish.

COLOMBIA: PUTUMAYO.
Above Pepino. Alt. 3100 ft.
3 Nov 1974 ~~Kla-Hz~~.
Escuela Atavaiva

4381. Anthurium

Herb 1 m. tall. Spadix + spathe green.

4382. Renealmia thyrsoidea (R. + P.) P. + E.
SSp. thyrsoidea
(A)
Herb on hillside 3.2 m. tall, 1-4 lvs. per clump. Infl. basal, subhorizontal. Lower bracts dark red to brown. Upper bracts deep pink. Bracteoles pale pink. Ovary white. Calyx red. Corolla + staminode bright yellow.
det P. J. M. Maas 1975
seed
col

4383. Gesneriad.
(A)
Shrub 1 m. tall. Fls. fleshy, orange.

COLOMBIA: PUTUMAYO.
Road from Mocoa to Villa-
garzon. Elev. 1900 ft.
5 Nov 74. Open roadside thicket

4384. Legum. (Pap.)
(4) Herb. vine in thicket.
Cd Pas Corolla deep pink.

4385 Costus
(4)
Cd Herb — 3.8 m. tall.
Brcts red below, both sides,
lobe green. Ovary white.
Calyx red. Corolla creamy white
Staminode pale pink with
yellow medial stripe.

COLOMBIA: PUTUMAYO
Cananguchos. rKm - 28 from Pepino between Villagarzon and Umbria. Alt. 1500 ft. Cut-over forest. 5 Nov 1974

4386. Anthurium
(2)

Col Climber 2 m. Spathe pale
1 we → Banta green. Spadix dark red.

4387. Tschuosiphon
(2)

Col Herb 1.5 m. tall. Infl. glaucous green. Fls. yellow.

4388. Palm.
(2)

Col Palm 1.5 m. Infl. axillary, dull red. Fl. green.

4389. Commel.
(2)

Col Terrestrial herb. Infl. & ~~fruits~~ calyx pale green. Fls. pale violet.

4390. Erythroxylum macrophyllum

live Young shrub 1.5m. tall along
Col Pas trail. Sterile Lvs. dark
shiny green above, pale green
beneath, areolar region
paler but no linea. Stipules
light brown, deciduous.

4391. Brunfelsia?
(1)
live. Herb 1.5 m. Lvs. medium
grn above, nearly as dark
below.

4392. Anthurium
(2)
Col Epiphyte. Spathe lt. green,
spadix pale yellow-green,
becoming dark green. Frs.
dark red!

4393. Stelis
(2) Epiphyte. Fls. pale yellow-
live Frs. yellow-green.
Col

COLOMBIA: Putumayo. Km. 42 from Pepino to Puerto Asis. El Whiskey. Finca Santa Marta Hilltop forest. Alt. 1260 ft. 5 Nov 1974.

4394. (3) Piper

Live col

Subshrub 2 m. tall. Lvs. succulent black-green above, shiny, atro-viridis beneath. Peduncle red. Spike creamy white.

4395. Grias neuberthii Macbride
det Scott Mori

(A)→NY col Pas

Tree 5-15 m. tall. Trunk DBH to 25 cm. Fls. cauliflorous. Infl. axis lt. brown. Calyx reddish. Petals pale yellow, pinkish below. Staminodes pale yellow. ~~Fr~~ fruits.

4396. Costus sp. nov. Maas.

live col Pas live-Utrecht

Spiral herb 70 cm. tall. Lvs. black green above, dark purple beneath, shiny.

4397. Stromanthe

Col

Herb 1.5 m. tall. Bracts, light green. Fls. salmon pink.

4398. Bambusoid

Col Pas

Low grass on forest floor.

4399.

Treelet 3 m. Fls. green.

4400. Heliconia

Col

Herb 4.0 m. tall, Leaf 3.1 m. long, blade 1.55 m. Inflt. pendent. Rachis yellow Bracts carmine red, pale creamy yellow basally. Pedicel green. Ovary green turning yellow.

COLOMBIA: PUTUMAYO.
Road from Sibundoy to Mocoa.
6 NOV 1977

Km. 130 from Pasto. 3500 ft. alt.

4401. Erica.
(4)
Col Pas - Shrub on open hillside, 2 m. Bracts + calyx deep pink. Corolla fleshy, pale pink. deep pink band towards apex, pale again at apex.

Km. 128 from Pasto. 4400 ft. alt. (Derrumbe)

4402. Gesn.
(2)
Col Herb. Vine on bank of Quebrada. Corolla white. Pale purple markings on lobes.

4403. Palicourea?
(4)
Col Pas ~~Shrub~~ Tree 10 m. Infl. axis red-purple (magenta). Corolla light blue.

4404. Solanum
(5) Treelet 3 m. Fls. purple. Fr. green.
Col Pas Along rocky quebrada. Full sun.

4405. Heliconia

(A)(3)

Col Foto

Herb 2.5 m. Petiole 1.5m. Blade 1.0 m. long, midvein reddish. Bracts spiral, red. Bracteoles light red. Pedicels + ovary green. Corolla white, curved dorsally green. In shady forest along quebrada. Infl. erect.

4406. Fuchsia putumayensis Munz

(4) det. P. Barry 1983.

Col Pas

Shrub 1-2 m. on open roadbank. Fr. + Fl. red.

4407. Xiphidium

Col, Pas

Herb 1 m. tall on roadbanks. Fls. white.

4408.

Col Pas

Climbing herb on dead branches in forest.

4409.
Col (3) Terrestrial fern 1 m. tall.

4410. Piper
(4) Terrestr. herb. fleshy stem.
Col Pas Infl. pale green. In forest.

4411. Peperomia
(2)
Col Fleshy herb on mossy rocks in forest. Spikes cream.

~~Tuba~~ Km. 126. from Pasto. Alt. 4660 ft.

4412. Orchid.
Col Pas (4) Terrestrial herb on steep slopes along road. Fls. rusty orange.

4413. Heliconia dielsiana Loes.
(5) det. L. Andersson 1985.
Col, Pas Herb on steep road bank. Petiole
Foto 1.55 m. Blade 1.3 m. Infl. 85 cm.
Infl pendant, plane. Rachis + bracts reddish orange. Pedicel, ovary + ~~corolla~~
Fls. bright yellow.

4414. Ericac.
(5)

(A) Col Pas — Shrub 1.5 m. on steep road bank. Pedicel, ovary, calyx + lower 2/3 of corolla br. red. Upper 1/3 + lobes of Corolla lt. green.

(A) 7.NY

4415. Anthurium
(4)

Col Pas Ilve — Herb on road bank 1 m. Spathe lt. green. Spadix dark red.

4416. Dicranopteris
(4) Climbing ~~bracken~~ fern.
Col, Pas.

Km. 123. 5500 ft. alt.

4417. Renealmia
"serendanga" (Inga)
Col Pas
Foto — Herb 3 m. tall on steep hillside. Stem reddish green. Lower bract brown, upper red. Axis red. Bracteoles + calyx red. Corolla, staminode + stamen lt. yellow. Fr. deep red turning blackish.
seed PTBG

4418. Heliconia

(4)

Bog
Col, Pas

Herb on steep hillside 5.3 m. tall. Petiole 1.5 m. Blade 1.3 m. Infl. 1 m. Pet. + Costa deep red. Infl. pendant

foto

Bracts spiralled; rachis + bracts red, upper margin dull yellow. Pedicel, ovary + fls. yellow.

4419. Bromel.

(3)

Col, Pas

Terrest. herb on steep open hillside. Lower bracts green, upper small bract red. Fls. yellow.

4420. Renealmia LIGULATA MAAS
DET. P.J.M. + H. MAAS 1989

(3)

Col

foto

Herb 4 m. tall on steep open hillside (next to 4417). Bracts brown. Infl. Axis red. Pedicel + calyx red. Corolla + staminode white. Fls. deep scarlet.

(same as 4333.

4421. Hibiscus ferox Malvac.

(6) Shrub 1-3 m. tall on
Col, Pas Steep hillside. Petiole + pedicels
red. Stem green. Calyx lt.
Red. Corolla deep yellow. Stam-
Live Harvard Forest en colm pale yellow. Calyx
in fr. deep red. FRS. yellowish.

Km 121 from Pasto. Alt. 5680 ft.

4422. Pityrogramma lehmannii

Spore
Live Fern on steep mossy wet
Col, Pas. road banks. Lvs. pure white
underneath.
Fragment GH

4423. Fern.

(5)
Spore Fern on steep mossy
Col Pas road bank.

4424. Peperomia

(1) Succ. herb with red speckled
stem - Spike greenish.

4425. Meriania hernandii Uribe Melast.
(5)

Cd, Pas. Treelet to 4 m. tall. Pedicel + calyx yellow. Petals + style bright orange. Anther purple, appendage orange.

Km. 103. Alt. 6000 ft.

4426. Pitcairnia Brom.

Cd, Pas Terrestrial herb on open hillsides. Infl. axis dark red. Fls. red-orange.

A → K

Km. 98 from Pasto. Alt. 6300 ft.

4427. Senecio?

Cd Climbing fleshy herb along waterfall. Rays + disc bright orange.

km. 88 from Pto. Alt. 7600 ft.

4428. Orchid

Herb on steep open road bank
Infl. 1 m. long. Fls. copper
brown.

4429. Genus.
Col, Pas.

Herb 2 m. tall. Lvs. pale
green to red underneath.
Calyx pink, subfleshy. FR.
green turning white.

Colombia: Putumayo, Sibundoy.
7000 ft. 31 Oct 74

4430. Piper

Col Pas Shrub 3 m. Spikes cream.

Left in Pasto 85 specimens
Sent to Bogota 136 - duplicates.

ECUADOR: PROV. PICHINCHA.
Road from Quito to Puerto Quito
between Nono and Tandayapa.
15 NOV. 1974.

Alt. 9220 ft.

4431. CYNANCHUM Asclepiad.
(5) DET. P. JORGENSEN 1991
GH. Tangled vine on hillside.
Quito Stem + lvs. dark green. Fls.
S white. White latex.
F
Ch (A) 7K

4432.
(2) Orchid on steep road bank.
(A) Quito. Fls pale purplish brown. Lip pale
AMES purplish green.

4433. Orchid.
(13)
(A) ~~Epidendrum~~ herb on ~~steep~~
HUE large boulder.
Quito
AMES
S

Alt. 7100 ft. About Km. 42 from Quito.

4434 Orchid.
(4)

(A) Quito U Ames

Terrestrial on steep rocky cliff. Ovary and abaxial surface of sepal pale yellow with dense dark red spots. Petals pale yellow. Column pale yellow with dark red spots.

4435. Orchid.
(3)

Quito Ames S

Vine hanging from steep rock cliff. Bracts red-purple. Fls. pale yellow.

4436.
(2)

(A) Quito Ames

Trailing herb on steep rocky cliff. Ovary lt. green with very pale brown spots. Fls. light green, pale brown at margin, occasionally with light brownish dots.

4437. Macleania bullata P.F.Yeo Ericac.
(A) (3) det. J. Luteyn 1976.
Quito Spindly shrub on roadbanks
GH to 4 m. tall. Pedicel + calyx
S light green. Corolla fleshy, bright
orange.

4438. Cavna leucocarpa Bouché
(4) det P. J. M. Maas 1975.
(A) Herb 4 m. tall along stream
U Fls. bright orange. Capsules
S yellow green with dark purple "spines"
GH
COL

4439. Anthurium pallens Schott
(2) det T. B. Croat 75
Quito Terrestrial herb (erect) to
GH 1.5 m. in forest. Spathe light
green. Spadix light green
turning red.

4440. Gasteranthus sp. Gesner.
(vine) det H. Wiehler 75
(A) Herb 1 m. in forest. Corolla
Quito bright orange; calyx green.
GH

4441. Alloplectus tetragonus Hanst. Gesneriaceae.
(2) Herb 1 m. tall in forest
Quito Calyx pale green. Corolla
GH bright red-orange.
det Wiehler 75

4442. Alloplectus tetragonoides Mansf. Gesneriaceae.
(4) var. rubra Wiehler mod.
(A) Herb to 2.5 m. tall in forest.
Live Bracts cream. Pedicel ~~red~~
Quito light red. Calyx red, white
Selby at middle near base. Corolla
DBN orange-red.
GH

4443. Maxillaria sp. Orchid.
(A) (4) det Garay
live Hanging herb 2 m. long
Quito on steep rock cliff. Ovary
U light green. Fls. bright yellow.
AMES

4444. Renealmia aurantifera Maas sp. nov,
(12) det Maas 1975.

Seed live
(A)
Quito
U
USM
GH
S
COL
F
US
K

Herb to 2-3 m. tall in low wet ~~pt~~ forest margin along road. forming small clumps of about 6 stalks/plant. Infl. to 90 cm. tall. Stem (Lower) bracts + axis dark red. Upper bracts lighter, greenish red. Bracteoles + pedicels pale orange. Ovary bright orange. Calyx pale orange. Corolla + staminode pure white. Fr. pale orange, turning black. Aromatic.
Arils deep yellow

Alt. 6900 ft. Km. 47 from Quito,

4445. Heliconia burleana Abalo + Morales
(4) det. L. Andersson 1984.

(A)
Quito
U.
GH
S

Herb 4.4 m. tall on hillside in forest margin. Stem, petiole, + canto dark red. Lf. blade 1.4 m. long. Rachis + bracts red. Bracteoles white turning brown. Pedicels green. Ovary yellow. Perianth green, white at base.

Frs. yellow.

Alt. 6500 ft.

4446. Orchid

(A)

(1) Herb on sheep road bank. Bracts magenta. Calyx + corolla magenta, lip + Column white.

Jaltomata procumbens
(Cav.) J. L. Gentry
det A. T. Hunziker
76.

ECUADOR: PROV. PICHINCHA.
Road frm. Aloag to Santo
Domingo. 17 nov 1974.
Alt. 6900 ft. Km. 36.

4447. Solanac.
GH (4) Roadside. Herb 0.5 m.
MO Fls. white, pale purple
~~BIRM~~ K abaxially.
NCU (A) → K

4448. Jaltomata
GH (4) Roadside. Herb. 0.5 m. / Fls.
USM pale violet.
MO (A) → K
~~BIRM~~ K
no!
~~Saracha dentata B.&P.~~ (= Jaltomata sp.)

4449. Solanaceae. det R.N. Lester + A. Child 1975
GH (3) Herb 1 m. on roadside
MO Fl. yellowish. FRs. dark red
~~BIRM~~ K at maturity.
(A) → K
6400 ft. alt.

4450. Psammisia ecuadorensis Hoer. Ericac.
GH (3) det. J. Luteyn 1976
COL Scandent shrub 3 m.
S Pedicel + calyx deep orange.
Corolla fleshy, ~~pale~~ pale orange
upper third + lobes pale green.

6400 ft. alt. H. impudica Abalo + Morales
4451. Heliconia ~~geniculata~~ det. Andersson 1985
USM (3) det G. Daniels 1976.
S foto Herb 3 m. tall. Lvs. 1 m.
GH infl. erect. Peduncle green. Bracts spiral,
& rachis deep red. Bracteoles
cream yellow. Pedicel pale
seed PTBG yellow-green. Ovary + ~~calyx~~
Calyx yellow. FRS. pale green
turning black at maturity.
Pedicel + coat dark red.

4451A. Renealmia aurantifera Maas
PTBG (seeds only) ~~6400~~ ft.
Alt. 5800 ft.

GH
S 4452. Heliconia griggsiana L. B. Smith
U. (8) det G. Daniels 76.
USM Herb 4 m. forming large
+ costa clump. Petiole 1 m., + blade
both sides. 2.4 m. long. Infl. pendant,
foto to 1.4 m. long. Bracts spiral,
glaucous, dark reddish brown.
Rachis and base of bracts red.
Bracteoles cream white. Pedicel
pale yellow. Calyx yellowish
brown. Corolla yellow. FR.
yellow.

Alt. 5000 ft. Tandape.

4453. Renealmia dolichocalyx Maas

U. (3)

S foto

GH

COL

Herb 3 m. tall on hillside along road in forest. Infl. racemes white to reddish bracts, dull green becoming dark brown. Pedicels ovary & calyx creamy white. Ripe fruit bright red. Arils bright orange.

TOPOTYPE

4454. Costus guanaiensis Rusby var. tarmicus (Loes.) Maas

U.

GH

Herb 3 m. tall. Bracts red below, green above. Ovary white. Calyx red. Calyx hyaline. Corolla & staminode yellowish pink. det Maas 1976.

Alt. 3500 ft.

4455. Costus guanaiensis Rusby var. tarmicus (Loes.) Maas

U. (3)

USM

GH

Herb 4 m. tall on open roadbank. Bracts red beneath, green apically. Ovary white Calyx white. Corolla & staminode pale yellow.

Alt. 2500 ft. Between La Palma + Santo Domingo.

4456. Renealmia ~~aurantifera~~ alpinia (Rottb.) Maas,

U. (5)
USM
S foto
GH
F
US

Herb 4 m. tall in open thickets along road. Rachis pale green. Bracts red, turning brown. Bracteoles pale ~~red~~ red. Ovary white. Calyx pale red. Corolla pale red. Stamen white. Frs. red-orange. Arils bright orange.

ECUADOR: PROV. PICHINCHA-
Road from Santo Domingo de los Colorados to Quevedo. Km. 27 from S.D. Alt. 1150 ft.
18 nov 1974

4457. Heliconia longa (Griggs) Winkl. ~~curtispatha~~ det. L. Andersson 1984.
(4) ~~det g. Daniels~~

U. S GH US

Herb 6 m. forming large clump in open place along road. Petiole to 1 m. long, leaf blade to 2.7 m. Peduncle pendant 1 m. long, Infl. 1.2 m. long. Peduncle, rachis and bracts red, axis with white hairs. Bracteoles pale pink. Fls. yellow. Fr. blue at maturity.

Santo Domingo de los Colorados, Main Plaza:

4458. Brunfelsia grandiflora D. Don subsp. grandiflora
(8) n.v. "Diamelo"

A COL USH S F US BIOM MO

Shrub 2-3 m. tall. Fls. violet turning white. Extremely frequent garden shrub.

COTOPAXI:
Prov. ~~[illegible]~~: Road from Quevedo to Macuchi. Alt. 2870 ft. 18 Nov 1974.

4459. Renealmia ~~[illegible]~~ oligosperma K. Sch.

U. (6)
USM 485
GH
S
F
US
K
MO

Herb to 3 m. tall in small clumps at edge of forest along road, in shade. Peduncle pale red turning green to brownish, bracts dark greenish to reddish brown; infl. bracts red turning light brown. Infl. axis pink turning red. Pedicel & ovary pink. Calyx deep pink turning red. Corolla tube white lobes hyaline pale yellow. Staminode pale yellow with deeper yellow medial stripe, FR. bright red. Aril orange.

ECUADOR: PROV. TUNGURAHUA.
BAÑOS. Hillside thickets along stream and wet meadows. 6400 ft.
21 NOV 74.

4460. Barnadesia parviflora Compos.
Spruce ex Benth. + Hook. f.
S (3)
GH
USM
foto
seed - PTBG
Tree 5 m. tall with thorns on trunk. Lower ⅓ of involucre pale green, upper ⅔ dark purple. Rays pale pink. ray tube + disc fls. white. Pappus pale purple.
det E. Zardini 1977.

4461. Xanthosoma
(A)
foto
S
GH
US
Herb 3 m. tall in swampy thicket. Spathe dark purple below, Cream above. Spadix cream.

4462. Centrum
(2)
GH
BIRM
Shrub 2 m. in thicket. FRS, turning black.

4463 Bessea
(3)
GH
BIRM
MO
Shrub 4 m. tall. Calyx and Corolla pale yellow green.
(A) → K

S 4464 Tropaeolum pubescens HBK. var. pubescens
USM (4) Herb vine in thickets.
GH Hypanthium red orange. Calyx
F → K lobes dark green. Petals blackish.
(A) det. T. Plowman 1977.
Tournefortia
4465.
GH (2)
Treelet 5 m. Fl. white.
Fr. white.

4466. Passiflora
GH (2) Vine in thicket. Sepals brown
S beneath, cream above. Petals creamy
white. Outer corona filaments
dark purple below, with yellow apex.
Middle filaments lt. green,
inner filaments abaxially cream
with purple apex, adaxially green.
Style, Androphore & filaments dark purple.
Ovary green.

GH 4467. Siparuna
S (2) Weak tree 5 m. tall. Frs.
dull red with lt. green spots.
Flesh red. aril red-orange.
Seeds black.

4468. Altensteinia fimbriata H.B.K.
det Garay, 1979. (Fl. Ecuador)
foto (2) Herb on steep dry rocky bank.
Selby along road. Fls. brown.
Ames

4469. Cavendishia Ericac
(2)
GH Shrub 1 m. on roadbank.
S Bract, pedicel + ovary red.
Corolla fleshy, light red, lobes white

4470. Spiranthes
(2)
foto Herb in wet sedge meadow.
Ames Fls. white.

4471 Orchid
(2) Epilithic herb on exposed
Selby slope. Sepals + upper petals yellowish
Ames brown. Lip pale yellow-green with
medial brown stripe. Column pale
brownish-purple

P. LANCEOLATA C.DC. (DET. R. CALLEJAS V/1995)

4472. Peperomia angustata HBK.

GH (2) det R. Callejas 1986.

F Scandent herb with red fleshy stems, green lvs. and yellow spike.

TUNGARAHUA.

ECUADOR: PROV. ~~PASTAZA~~.

Road from Baños to Mera

23 NOV 74.

Machay. 5060 ft. 11 mi. E. of Baños.

S 4473. Renealmia thysoidea (R+P.) P.+E.

U. (9) "San Juan" Frs. used as dye to mark wood!

USM Herb on steep road bank. 3 m.

foto tall. Peduncle pale green, Bracts

US pale red turning brown. Infl. bracts

F + bracteoles pale red. Calyx red, lobes yellow.

K Corolla + staminode yellow. Frs. pale

GH red to red, black at maturity. Arils

MO yellow orange to orange. Seeds black.

P

UC

4800 ft. Alt. 14 mi. E. of Baños.

F US

GH

S 4474. Renealmia nicolaioides Loes.

U. (6) "

USM foto Herb on steep road banks, to 4.5 m.

K COL tall. Very common. Stems + petioles

dark red. Infl. bracts red-orange, turning brown. Bracteoles pink. Ovary ~~pink~~ cream. Calyx 3 lobed in x-section cream tube with pink at concave part. Corolla creamy yellow lobes deep pink, staminode fleshy, yellow. Stamen yellow. FRS. green at ~~maturity~~ accrescent, persistent calyx becoming fleshy, yellow orange to red-orange. FRS. becoming purplish black. Aril yellow orange. Seeds lt. brown.

Rio Negro. Alt. 4220 ft. 18 mi. E. of Baños.

4475. Costus ~~spectabilis~~ asplundii (Maas) Maas
(4) det Maas.

U. USM S GH foto

Herb 4 m. tall in open thicket along road. Bracts red both sides, appendages (exposed part) lt. green both sides, reflexed. Ovary white, calyx bright red. Corolla ~~white~~ white. Staminode white with yellowish medial stripe. Stamen pale pink.

Alt. 4120 ft. 20 mi. from Baños.

4476. Thelypteris torresiana (Gaud.) Alston fern.
USM (3) Herb on steep road bank. Dry place
GH next to house. det. Alan Smith 1983.
S

Cavendishia

4477. gilgiana Hoerold Ericac.
USM (4) det. J. Luteyn 197?
F Shrub, scandent, to 2 m. Bracts
S & rachis deep pink. Ovary & calyx
GH white. Corolla tube white, fleshy,
deep red at apex, lobes tipped white.
Fr. white, calyx lobes tipped deep
pink in fr. Fr. turning blue-violet
at maturity.
→ Cavendishia tarapotana (Meisner) Benth. & Hook.
var. tarapotana det. Luteyn 1982

4478. Gonzalagunia dependens R. & P.
GH (3) det D. Simpson 1976.
F Shrub 2.5 m. Fls. & frs. pure
S white.

var. pastasana (Diels)
Soejarto

4479. Saurauia prainiana Busc.
F Treelet to 4 m. Petals white.
USM (3) Frequent. det. Soejarto 1982.
GH

Psychotria? Palicourea grandifolia (Willd. ex R. & S.)
4480. Standl. var. spruceii (M. Arg.) Steyerm.
GH (3) Shrub 3 m. Rachis deep orange. Pedicels
F and calyx yellow. Corolla bright yellow.
S (A) 7K det. D. Simpson 1976.

ECUADOR: PROV. PASTAZA
MERA.
22 NOV 1974.
Alt. c. 3900 ft. Remnants of primary forest.
Drymonia uda Wiehler ined.
4481. ~~Alloplectus~~ det Wiehler 75
GH 1
Herb. Vine. Infl. 1.5 m. from ground.
Bracts + calyx red orange. FRS. deep
red-orange.

4482. Nephelea erinacea (Karst.) Tryon
GH (6) var. ERinacea
S Treefern with trunk 2.5 m. tall.
F Lvs. 2.3 m. long. det. Tryon 1987.

GH 4483. DIPLAZIUM PINNATIFIDUM KUNZE
USM (1) Cespitose fern. Lvs. dark green,
S thicly DET. D.B. LELLINGER 1989
F
US

4484. Renealmia puberula Steyermark
U. (1)
GH foto
S
Herb 1m. tall in forest. Infl. axis
light green. Lower peduncle bracts dark red-
brown. Upper bracts dull green. Fruits
red ~~[illegible]~~. Persistent calyx fleshy red-orange
Calyx red. Corolla white. Stem white with yellow
stripe. Stamen pink.

4485. Justicia Acanth.

US (2) det. D. Wasshausen 1975.

GH Herb to 1.0 m. tall. Fls. pale violet.

4486. grias neuberthii Macbride

(4) (A) det. Scott Mori 1976.

USM Tree 20 m. tall. Calyx yellowish

NY green. Tepals fleshy, yellow,

S reddish beneath. Trunk DBH.

GH

Dalbergaria ericae (Mansf.) Wiehler

4487. ~~Columnea~~ det Wiehler 1975

GH (4) 4

S Climbing

DBN (A) Shrub 2 m. tall, epiphytic.

SELBY Lvs. tipped with dark red beneath. Bracts light green. Calyx bright yellow. Corolla dull yellow, lower margin of lobes with 4 dark red markings.

4488. Anthurium

GH (1)

Vine. Spathe lt. green. Spadix dark green.

4489. Selaginella
GH (1)

Herb on forest floor.

→ Dracontium foecundum Hook.f. det. J. Bogner 1987
→ Dracontium corderi Hoof. f. det S. Mayo 1982.

4490. Dracontium ornatum K. Krause
(2) det. M. Madison 1976.

Herb in cut over forest.
GH peduncle brown, white snake
S marking. Spathe abaxially dark
Selby greenish brown. Adaxially purplish
#95-76-14 brown, with distinct white portion
at base. Spadix purple black.
Corm round tuber 10 cm. diameter.

4491. Coccoloba follax Lindau Polygon.
(A) (2) Tree 6 m. tall from stump 4 in. dia.
GH Infl. pendant. Rachis bright pink.
S Perianth dark pink. det. R. A. Howard 1984.

4492. Monnina
GH (3)
USM
S Shrub 1.5 m. in open, cut over forest.
Rachis purple. Bracts pale green.
Corolla dark blue purple. Keel yellow.

4493. Sobralia? Orchid.
U (2)
AMES

Reedstem herb along trail on bank, 1 m tall. Fls. all white.

4494. Phoradendron Loranth.
GH (2)
S

Parasitic herb on Vismia sp. Infl. axis + fruits deep yellow.

4495. Alloplectus tetragonoides Mansf. Gesneriac.
(A) (2)
Selby GH

Herb to .7m in forest. Pedicel + calyx red. Corolla tube deep yellow, lobes dark red.

4496. Neea
GH (1)

Shrub 2.5 m. Rachis + fols. deep pink.

(A) → GB

4497. Pilea Urtica.
GH (1)

Herb on moist bank on forest trail. Fls. pale pink

4498. Peperomia
GH (1)

creeping herb on fencepost. Spikes cream.

4499. Cyclanth.

GH (1)

Terrestr. herb 1.5 m. tall. Bracts cream yellow, greenish without. Infl. brown.

marantina (Willd. ex Koern.) Koch

GH 4500. Calathea ~~lutea (Aubl.) Schultes~~

U. (4) det. H. Kennedy 1986.

USM Foto

HK ← (A) Herb 2 m tall. Bracts basally green, apically orange. Bracteoles pale orange. Calyx hyaline cream. Corolla tube basally pale orange, purple brown (lobes). Staminode + Stamen yellow-orange. Fr. orange.

4501. Anthurium

GH (1)

live! Climbing herb. Spathe pale pinkish green. Spadix black-purple. Petiole pale red.

4502. Pitcairnea bakeri (André) André Bommelin

(1) det LB Sm. 1975

GH Epiphyte. Bracts dark brown. Calyx green with brown dk. scurfy hairs. Corolla + filaments bright orange.

(A) → K

4503. Coussarea klugii Steyerm. Rubiac.
GH (3) det. D. Simpson 1976.
F Treelet 4 m. Calyx + corolla
S white. Strong fragrance of gardenia.

4504. Floscopa Commelin.
GH (1) Creeping herb. Fruits dark, purple-black.

4505. Larnax Solanac.
GH (4) Herb 1 m. tall in 2° forest.
USM Calyx light green. Petals dark
MO purple-brown. Calyx in fr. pale
K green with dark green veins. Fr.
greenish white. Anthers pale
violet.

4506. Marcgravia sf. brownei Marcgrav.
GH det A.C. de Roon 1975
U. (2) Vine 5 m. tall. Calyx pale yellow
green. Buds green. Nectary purple.

4507. Heliconia spathocircinata Aristeguieta
U. (A) (2) Herb 1 m. in forest. Rachis +
GH photo bracts yellow on ventral side, red
dorsally. Pedicel ovary + fls. pale
yellow. det. L. Andersson 1984.

4508. Pitcairnea arcuata André Brom.
GH (A) Epiphyte. Bracts carmine red.
US (2) Calyx brown below, yellow apically.
Corolla & filaments bright yellow
(A) → K

4509. Drymonia hoppii (Mansf.) Wiehler Gesneriad.
Selby (2) -det Wiehler
GH Climbing vine on treetrunk in open chacra. Bracts bright red. Calyx yellow with red veins. Corolla pale yellow, lobes deep yellow.

4510. Habenaria monorrhiza (Sw.) Rchb.f.
AMES (A) (2) Terrest. herb on road bank.
S Fls. white, det. Garay

Trichipteris pubescens (Baker) Tryon
GH 4511. ~~Cyathea~~ det. R. Tryon 1987.
S (7) Treefern 2 m. tall in forest.
F Lf. 1.5 m.
US
MICH

4512. Peperomia
GH (1) Fleshy herb. Stems & petiole with thin purple bands. Snakelike. Bracts & Spikes pale green

GH
S (2)(1) 4513. Elaphoglossum fern
Epiphyte on log.

4514. Capparac.
(2) Gynandropsis coccinea Benth.
seed
Herb 1.5 m. along rocky stream
S in sun. Young ~~stem~~ twigs + petioles
GH dark purple. Pedicel red. Fls. br. red-orange.
Frs. dull yellow-orange.

4515. Dioclea Pbrac.
GH (3)
USM Woody vine in thicket along
S Stream. Buds red purple. Calyx
pale red-purple. Petals bright
red-violet near base, violet apically.
~~Banner~~ with paired pale yellow spots
at base.

4516 Anthurium ~~miodense~~ Sodiro Arac.
(3) det. T. Croat 1980.
F Climbing herb along stream.
S Spathe light green. Spadix
GH dark red-purple. Frs. bright red.

4517. Elaphoglossum

GH S (2) Epiphytic fern on dead treetrunk along stream.

4518. Tococa symphyandra (Tr.) Cogn. Melast.

GH (1) Herb 0.5 m. along forest trail Unripe fruits dull red. Ripe fruits brilliant sky blue.
det Wurdack 1975

4519.

GH (1) fern on treetrunk in forest.

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24 NOV 1974. Same Locality. Dist. Prim. Forest.

4520. Siparuna

GH (2) Treelet 4 m. FRS. light green, aromatic.

4521. Blakea subvaginata Wurdack Phytologia 43(4): 347. Melast.

GH US S (A) (3) Tree 10 m. in swampy woods.
Calyx pale green.
det Wurdack 1975 PARATYPE

4522. Calathea propinqua (P. & E.) Koern. 1985. ~~sp. nov.~~ det H. Kennedy 1978.

GH U- US HK (A) (4) Herb in swampy forest.
Bracts purple brown abaxially, green adaxially. Calyx & Corolla hyaline white. Staminode golden yellow.

F GH 4523. (2) Psychotria macrophylla R.+P. Subsp. macrophylla Infl. Shrub 1 m. Axis dark blue-green. Fls. + frs. white. det D. Simpson 1976.

GH 4524. Gurania (A)(1) Herb vine in thicket along trail. Hypanthium bright green. Corolla red-orange. (A) 7 K

GH seed(1) 4525. Psychotria Shrub 1.5 m. Infl. axis blue-violet. Ovary + calyx lt. green. Ripe fruits bright blue.

GH S 4526. Psammisia ferruginea A.C. Smith Erica. (A)(1) det. g. Luteyn 1976. Tall shrub or vine 3-4 m. Pedicel + calyx pink. Corolla red.

GH S 4527. Diplazium (4) Terrestr. fern. Fronds 1 m.

GH spore(1) 4528. Xiphopteris Trop. Epiphytic fern on fallen log in chacara.

GH 4529. Utricularia jamesoniana Oliv.
U.. (A) (1) Epiphytic on mossy log in chacara. Fls. white, lip tinged violet with yellow spots. det P. Taylor 1975

4530. Orchid
AMES (A) (1) Tiny epiphytic on fallen log in chacara. Fls. pale red.

AMES 4531. Orchid.
(A) (1)
Epiphyte on fallen log in chacara. Upper lip purple. lower lip yellowish with dark red stripes

GH 4532. Peperomia
Epiphytic on rotten log in forest. Spikes cream.

4533. Orchid.
AMES (A) 1
Epiphyte on fallen log in chacara. 6-8 Lips light purple brown. Petals pale cream tinged brownish. Lip cream with dull yellow center.

4534. Orchid.
AMES (1) Epiphytic on fallen log in chacara.
Fls. dull yellow.

AMES 4535. Orchid.
(A)(1) Epiphyte on fallen log in chacara.
Lvs. cordate. Fls. pale yellow.

AMES 4536. Orchid.
(A)(1) Herb on fallen log in chacara.
Fls. pale yellow-green.

AMES 4537. Orchid.
(A)(1) Epiphyte on fallen log in chacara.
Fls. dull mustard yellow.

AMES 4538. Orchid.
(1) Epiphyte on fallen log in chacara.
Fls. pest, brown.

AMES 4539. Orchid.
(A) (1) (3) Epiphyte on fallen log in
Selby Chacara. Fls. dull purplish brown.
(large cordate lvs.)

GH 4540. Elaphoglossum
(1) Epiphytic on fallen rotten log.

4541.
GH (1) terr. fern in dark wet forest along stream.

4542.
GH (2) Terrest. fern in swampy forest. Edge of chacara.

4543.
GH (1) fern on fallen treetrunk in wet lo. forest.

4544. Trichomanes
GH USM HB S (4) Creeping fern on fallen log in wet forest.

4545. Cremosperma sp.
DBN Selby GH (3) Terr. herb on steep hillside in wet dark forest. Fls. white. det H. Wiehler 75

4546. Anthurium
GH (1) Epiphytic herb. Lvs. thick coriaceous, yellow green above, pale green beneath. Spathe bright yellow green. Spadix green.

4547. Philodendron cf. verrucosum

GH (2) (2) Climbing herb. Spathe dark red with white hairs. Spadix ♂ part white. ♀ creamy yellow.

→ Banta Waimea Arnold A.

FTG Acc. 81-177. det T Croat 75

4548. Trianaea? or Jianulloa cf speciosa Solanac.

F GH (1) Liana on Grass in chacara, 10 m. tall. Fruit bst!

~~No~~ (live!) → died

Cult. sterile specimen collected at Woburn, Mass. Greenhouse grown. 10 Aug 1975.

4549. Anthurium triphyllum Brong. ex Schott.

S GH (2) Climbing herb. Spathe pale green. Spadix cream. Lf.

det. Madison 1979.

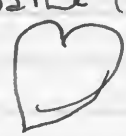
4550. Anthurium ovatifolium?

GH S (2) Epiphyte herb on fallen log along trail. Lvs. Coriaceous. Spathe lt. green. Spadix lt. ~~gr~~ red.

det. T. Croat 75

4551. Anthurium

GH (1) Climbing herb. Spathe light green. Spadix red.



→ Heliconia stricta Huber det. L. Andersson 1981.

cf humilis det G. Daniels

4552. Heliconia ~~griggsiana L.B. Smith + I. drobo~~

photo (1) (A)

U.

GH - infl only

Herb 1.5 m. in forest. Rachis yellow. Bracts plane, dorsally yellowish green. Upper margin dark green, red on sides. Bracteoles pale yellow. Ovary white. Perianth green.

det Maas 1975

4553. Renealmia thyrsoidea (R. + P.) P. + E.

(see 4473 (4)

det P. J. M. MAAS 1975

U.

USM

US

GH

Herb 4.5 m. tall in dense wet secondary forest. Bracts bright red. Calyx red, lobes yellow. Corolla + staminode yellow. FRS. pale red, black at maturity.

4554. Heliconia schumanniana Loes.

(A) (1)

det. L. Andersson 1984

U.

unicate

Herb 2 m. tall in dense primary forest. Rachis + lower half of bracts yellow-orange, apically half of bracts red. Pedicel yellow-orange. Lower ½ of ovary white, upper half green. Perianth yellow orange.

4555. ~~Alloplectus~~ Drymonia umecta Wiehler
GH (1) det Wiehler 75

Vine in chacara. Bract pink, mucilaginous. Calyx translucent, white at base, deep pink toward apex. Corolla tube white at base, yellowish toward apex, lobes deep yellow with dark red-brown spots on ~~tube~~ lower 3 lobes.

4556. Pierrunia Sinaroub.
GH (1) Small tree 5 m. Infl. cauliflorous 1.5 m. from ground. Frs. pale orange.

4557. Pseuderanthemum weberbaueri Mildbr. Acanth.
GH (1) Herb 1.5 m. tall in chacara. Fls. pinkish white.
det D. Wasshausen 1976.

4558 Gurania
GH (1) Vine in chacara. Fls. orange.

4559. Hyospathe schultzeae Burret Palm.
GH (1) Palm 1.5 m. in understory. Rachis red-orange. Frs. green.
det H.E. Moore, Jr.

4560. Dichorisandra
U. (2) Herb 1 m tall in forest. Fls. pale
GH blue violet. FRs. green.

4561. Palicourea sp. MARCGRAVII ST. HIL.
DET. C. M. TAYLOR 1989
F (A) (2) Det. D. R. Simpson 1977.
GH Tree 5 m. Rachis bright pink.
Ovary red purple. Corolla light violet,
FR. green.
(A) → K

4562. Philodendron cf. quttiferum Kunth
GH (1) Climbing herb. Spathe lt. green
live in lower half, yellowish towards apex.
Spadix ♂ part cream, ♀ part greenish.

Monolena Primulaeflora Hook. f.
4563. ~~Sotpinga?~~ det Wurdack 1975.
US (2) Epiphytic fleshy herb on fallen log in
GH forest. Petioles bright pink. Remains of
calyx pale brown. Lf. green above,
pale pink beneath.

4564. Piper
GH (2) Shrub or treelet 3 m. tall in 1° forest.
F Spikes pale green.

F 4565. Schefflera DIELSII HARMS Aralian.
GH seed (A) 4 Terrest. or epiphytic shrub or treelet to
USM (A) → K 3 m. Fls. purplish. Ripe fr. black.
S
DET. D. FRODIN 1990

4566. Clusia

NY GH (3) Tree 3 m. in open pasture. Fls rose-pink.

Alt. 4200 ft.

4567. Heliconia ~~dietsii Loes.~~ pastazae Andersson det. L. Andersson 1984.

(4) (A) Herb 4.75 m. long. Petiole 1 m. Blade 2 m. Infl. pendant, spiral. Rachis + bracts deep red, margin of bracts recurved, yellow. Pedical + bracts pale yellow. Corolla yellow. det. L. Andersson 1982.

U. USM

4568. Brunfelsia grandiflora

(1) Cult. shrub 2 m. tall. Fls. violet fading white.

Prov. Tungurahua. Baños.
Trail above town. 25 nov 74.

GH F 4569. Sessea

BILLY (1) (A) FR. Treelet 3 m. FRS. green, turning brown. (A) → K

4570. Orchid.

AMES (1) (A) Terre. orchid on trailbank. Fls. white.

GH S 4571. Siphocampylos affinis (Mirb.) McVaugh

(2) Scandent shrub 1-2 m. Calyx pale green. ~~Corolla~~ Corolla creamy yellow det. S. Jeppesen 1978

Baños.

GH * 4572. Capsicum ciliatum H.B.K.

(2) (A) → K Shrub 1 m. Fls. br. yellow. det. T. Hunziker